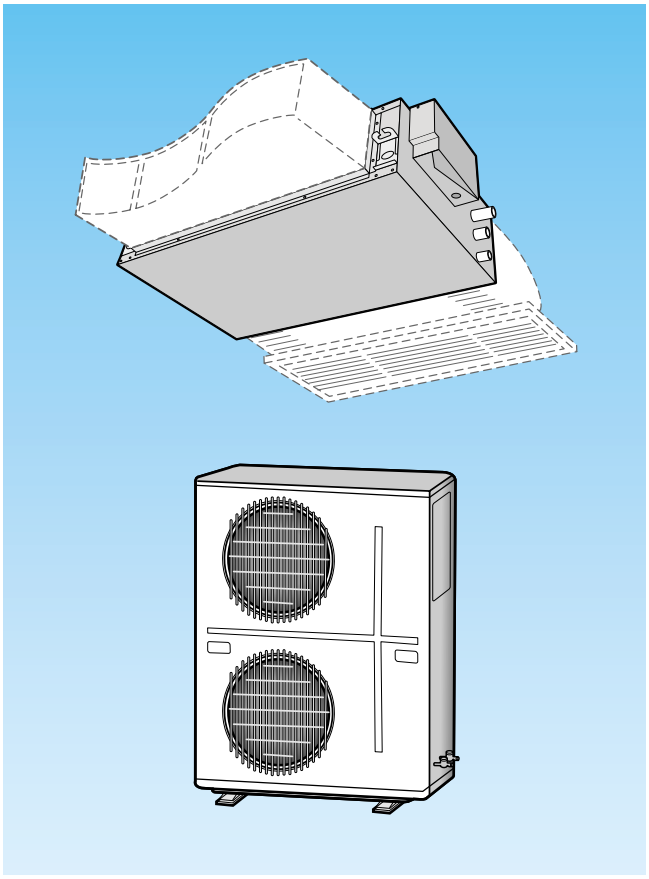
SAMSUNG

DUCT TYPE AIR CONDITIONER

INDOOR UNIT	OUTDOOR UNIT
HH105EZM	UH105GZM
HH128EZM	UH128GZM
HH140EZM	UH140GZM
HH175EZM	UH175GZM
HH175ECM	UH175GCM

SERVICE Manual

AIR CONDITIONER



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1. Product Specifications

1-1 Table

MODEL	INDOOR UNIT			HH105EZM	HH128EZM	HH140EZM	HH175EZM	HH175ECM
	OUTDOOR UNIT			UH105GZM	UH128GZM	UH140GZM	UH175GZM	UH175GCM
Capacity	Cooling		Btu/h	34,000	43,700	47,800	54,600	56,300
			W	10,000	12,800	14,000	16,000	16,500
	Heating		Btu/h	38,200	47,800	54,600	61,400	64,800
			W	11,200	14,000	16,000	18,000	19,000
Power Supply				3ø, 380-415V~, 50Hz				
Power Input	Cooling		kW	3.45	4.45	5.12	5.7	6.9
	Heating		kW	3.0	5.25	5.97	5.6	6.9
Running Current	Cooling		A	6.1	7.9	10.6	9.6	12.2
	Heating		A	5.35	9.3	12.1	9.4	12.2
Indoor Unit	Fan Speed (at 0mmAq)	H.H	r.p.m	1,000	1,050	1,050	1,000	1,000
		Hi	r.p.m	860	1,000	1,000	900	900
		Med	r.p.m	760	950	950	800	800
		Low	r.p.m	660	900	900	700	700
	Air Circulation (at 14mmAq)	H.H	m^3/min	35	36	36	45	45
		Hi	m^3/min	29	34	34	39	39
		Med	m^3/min	23	32	32	33	33
		Low	m^3/min	20	30	30	30	30
	Noise Level (Sound Pressure)	Hi	dB(A)	48	49	49	51	51
		Med	dB(A)	47	48	48	49	49
		Low	dB(A)	46	47	47	48	48
	Heat Exchanger	Type		Wave fin coil				
		Row x Stages x Fin Pitch		3 x 14 x 1.7(900mm)				
	Fan	Type		Sirocco				
		Motor Output	W	-	211	211	-	-
	Dimensions	H	mm	390	390	390	390	390
		W	mm	1,110	1,110	1,110	1,400	1,400
		D	mm	650	650	650	650	650
	Weight	kg	Net / Gross	66 / 77	66 / 77	66 / 77	75 / 88	75 / 88
Outdoor Unit	Fan Speed	Hi	r.p.m.	900	900	900	900	930
		Low	r.p.m.	500	500	450	500	450
	Air Circulation (Hi)		m^3/min	-	-	90	90	90
	Sound Pressure Level		dB(A)	65	65	65	65	67
	Fan	Type		Propeller				
		Motor Output	W	-	114	114	114	114
	Compressor	Type		Scroll				
		Model		ZR45KC-TFD	ZR61KC-TFD	ZR61KC-TFD	ZR72KC-TFD	ZR81KCE-TFD

Table(cont.)

MODEL	INDOOR UNIT			HH105EZM	HH128EZM	HH140EZM	HH175EZM	HH175ECM
	OUTDOOR UNIT			UH105GZM	UH128GZM	UH140GZM	UH175GZM	UH175GCM
Outdoor Unit	Compressor	Capacity	kW	11.1	14.6	14.6	17.7	19.7
		Protection		Internal				
	Heat Exchanger	Type		Wave fin coil				
		Row x Stages x Fin Pitch		2 x 48 x 1.7(935 / 915)				
		Face Area	m^2	0.756	1.122	1.122	1.122	1.122
Condition	Refrigerant	Control		Electrical expansion valve				
		(R22)Charge	g	2,200	4,300	4,300	3,750	3,850
	Dimensions	(H x W x D)	mm	968 x 880 x 320	1,270 x 930 x 385			
	Weight	kg	Net / Gross	85 / 90	130 / 140	130 / 140	136 / 146	136 / 146
	Indoor Unit	Cool(DB/WB)	˚C	27 / 19				
		Heat(DB/WB)	˚C	20 / 15				
	Outdoor Unit	Cool(DB/WB)	˚C	35 / 24				
		Heat(DB/WB)	˚C	7 / 6				
Piping	Pipe O.D.	Liquid	mm(inch)	9.52(3/8")				
	Size	Gas	mm(inch)	19.05(3/4")				
	Connection Method			Flare				
	Between	Height	m	Max. 30				
		Pipe Length	m	Max. 50				

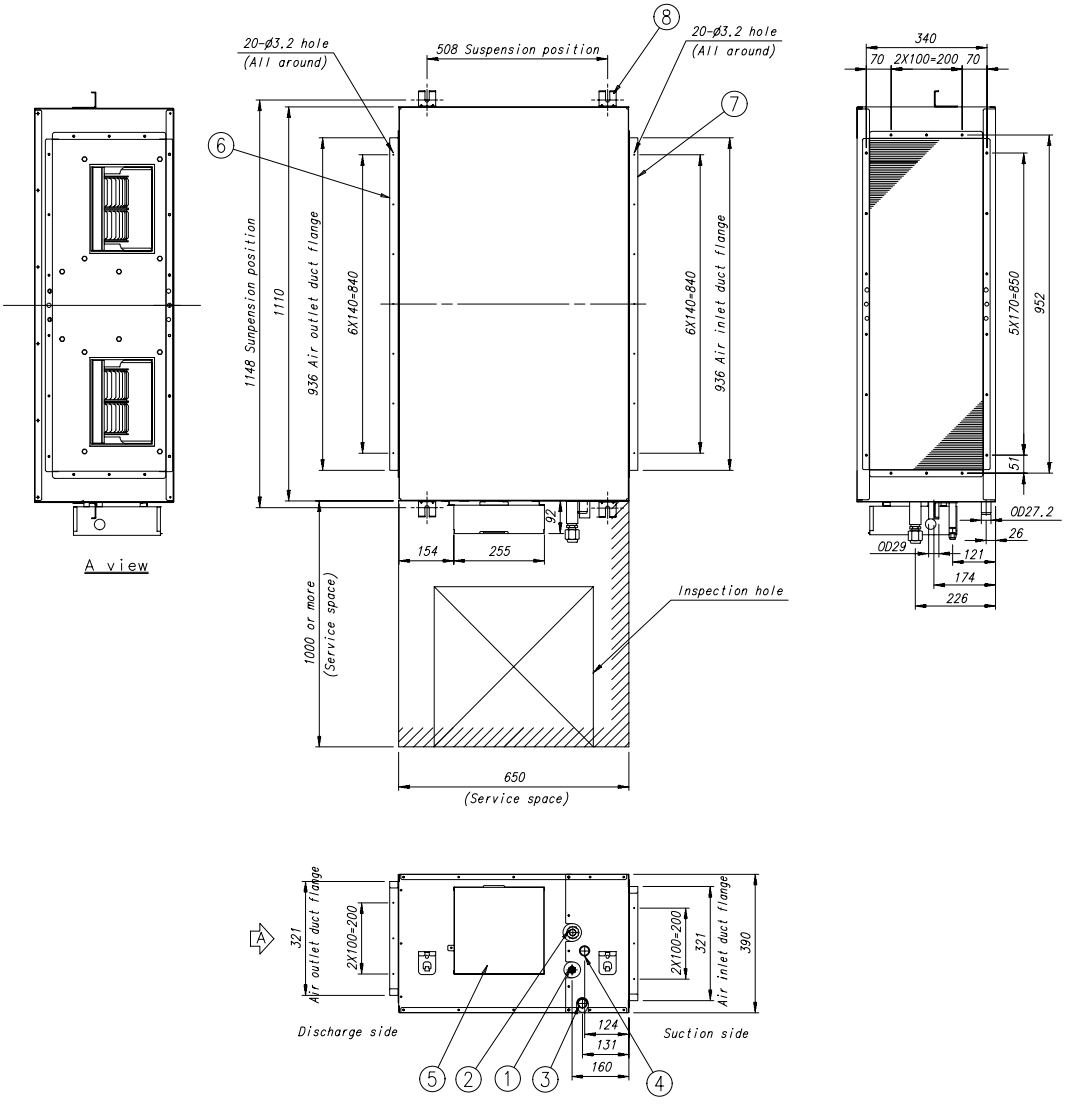
Notice : This model is tested under the external static pressure of 14mmAq.

1-2 Dimensions

1-2-1 Indoor Unit

■ HH105EZM / HH128EZM / HH140EZM

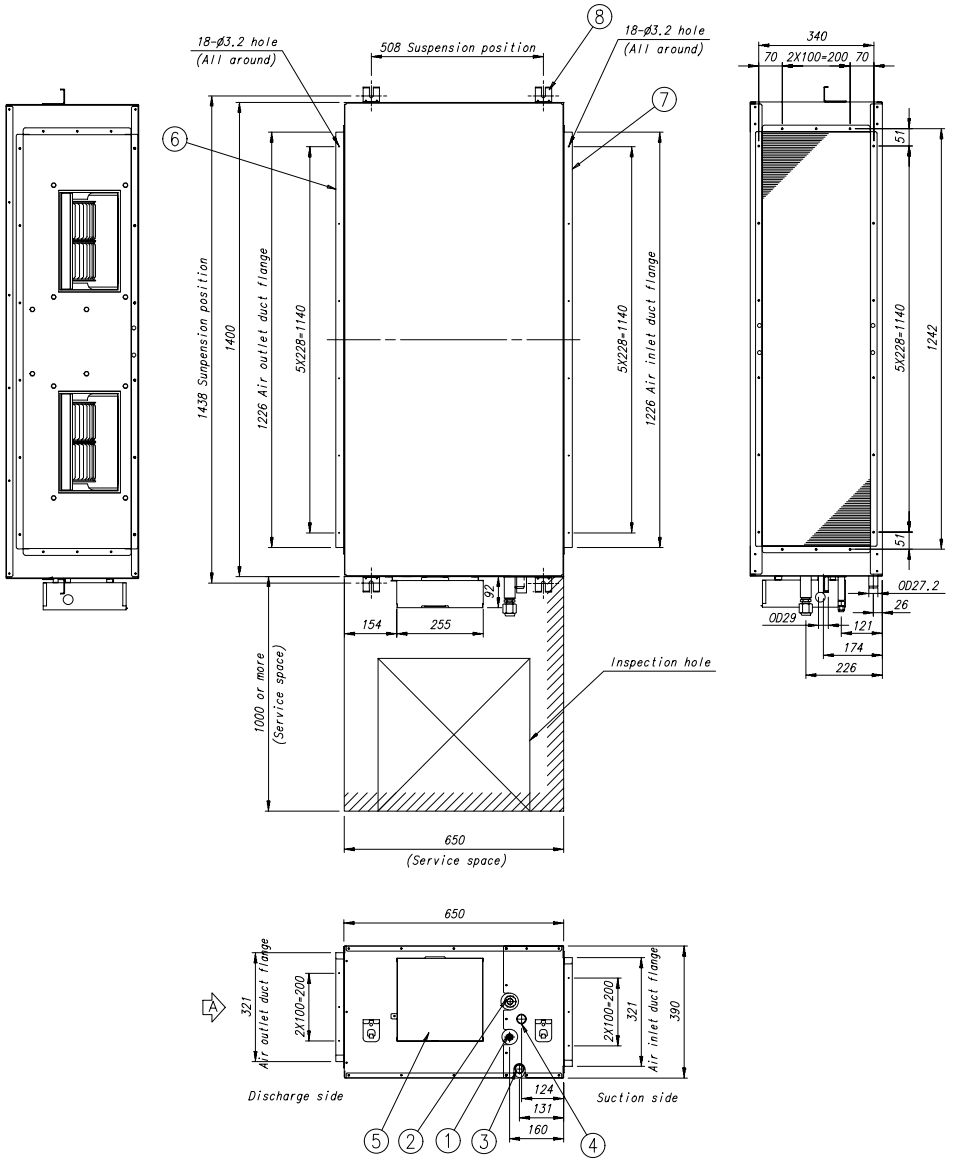
(Unit : mm)



Number	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø19.05 Flare
3	Drain pipe connection	OD27.2 ID21.6 (without drain pump)
4	Drain pipe connection	OD29 ID25 (with drain pump)
5	Power supply connection	
6	Air discharge flange	
7	Air suction flange	
8	Hook	For M8~M10

■ HH175EZM / HH175ECM

(Unit : mm)

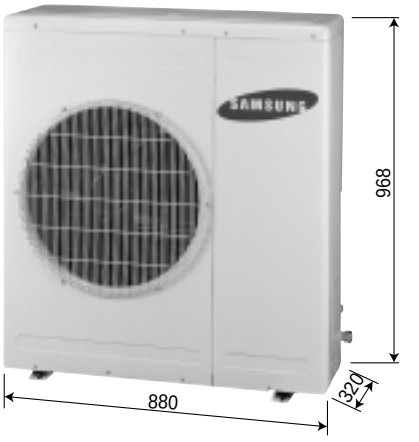


Number	Name	Description
1	Liquid pipe connection	ø9.52 Flare
2	Gas pipe connection	ø19.05 Flare
3	Drain pipe connection	OD27.2 ID21.6 (without drain pump)
4	Drain pipe connection	OD29 ID25 (with drain pump)
5	Power supply connection	
6	Air discharge flange	
7	Air suction flange	
8	Hook	For M8~M10

1-2-2 Outdoor Unit

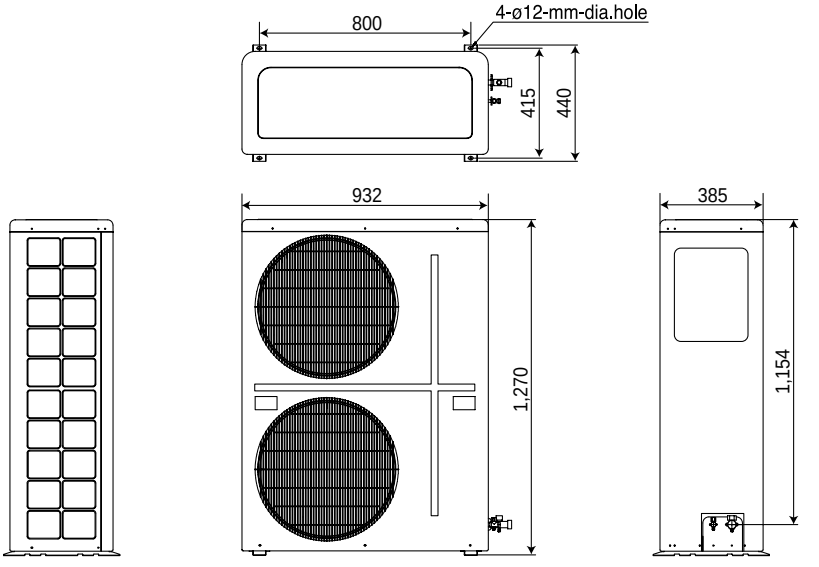
■ UH105GZM

(Unit : mm)



■ UH128GZM / UH140GZM / UH175GZM / UH175GCM

(Unit : mm)

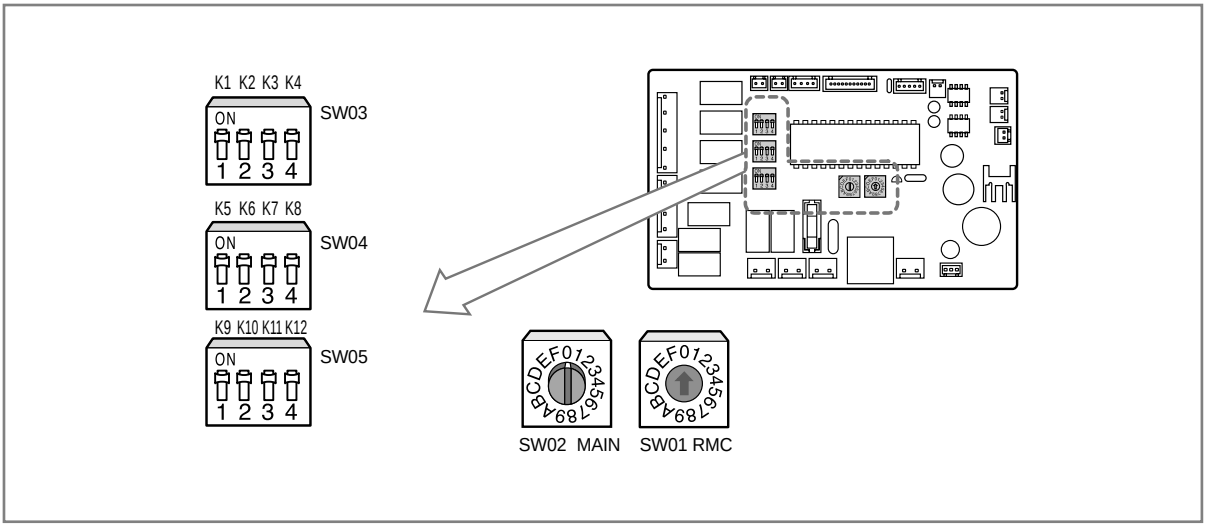


2. Installation

2-1 Assigning Address to Indoor Unit

1. Before installing the indoor unit, assign an address to the indoor unit according to the air conditioning system plan.

2. The address of the indoor unit is assigned by adjusting MAIN(SW02) and RMC(SW01) rotary switches.



3. The MAIN address is for communication between the indoor unit and the outdoor unit.
   Therefore, you must set it to operate the air conditioner properly.

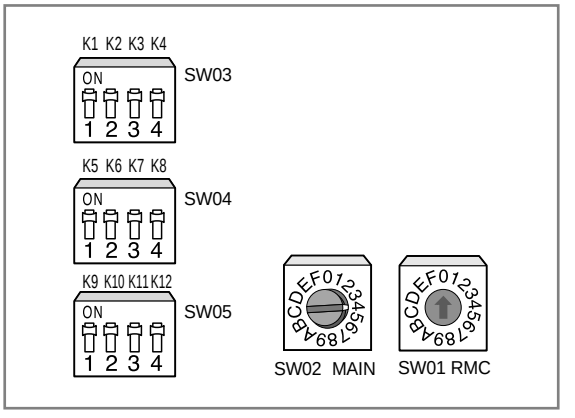
4. It is required to set the RMC address if you install the wired remote controller and/or the centralized controller.

5. If you install optional accessories such as the wired remote controller, centralized controller, etc. see an appropriate installation manual.

6. If an optional accessory is not installed, you do not have to set the RMC address. However, adjust K1 and K2 switches of the SW03 DIP switch to "ON" position in this case.

7. Set the MAIN address by adjusting the rotary switch(SW02) from 0 to F. Each indoor unit connected to the same outdoor unit must have different address.

   i. e. If an indoor unit does not have an optional accessory and its MAIN address is "4".

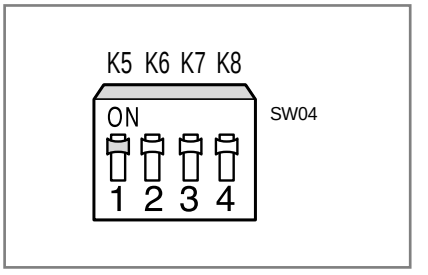


2-2 Additional Functions

■ Compensation for lost temperature in heating operation

• Reduces the difference between an actual room temperature and a sensed temperature by the air conditioner when heating.

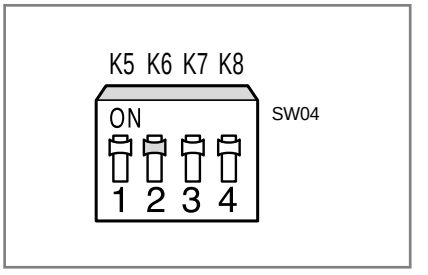
Switch No.	Switch ON	Switch OFF
K5	2°C compensation	5°C compensation



■ Adjusting filter cleaning cycle

• You can adjust the cycle for filter sign indicator.

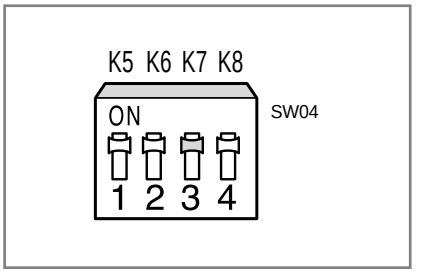
Switch No.	Switch ON	Switch OFF
K6	1000 hours	2000 hours



■ Hot water heater

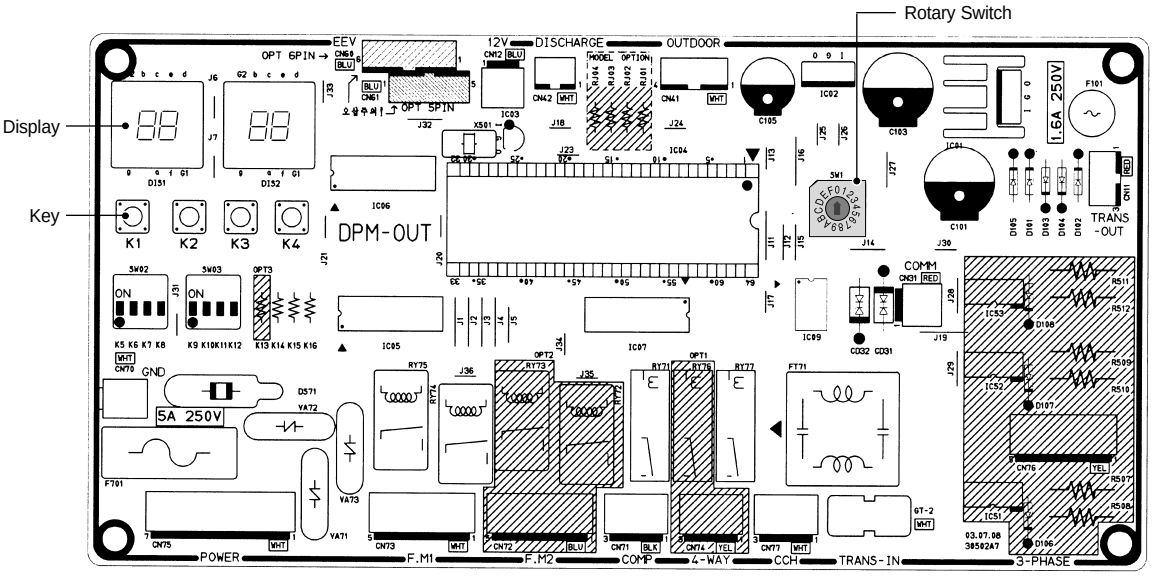
• You must adjust the K7 when you install the hot water heater.

Switch No.	Switch ON	Switch OFF
K7	No use of hot water heater	Use of hot water heater



2-3 Setting Up Option Switches

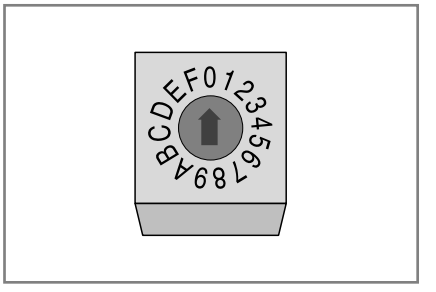
■ Option Switch



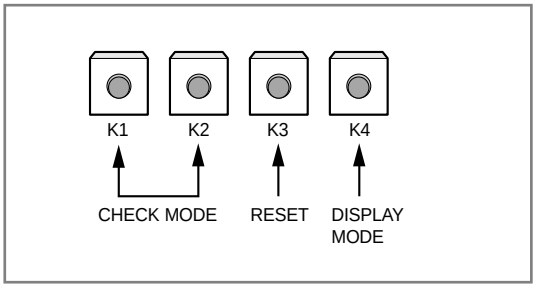
■ Rotary Switch

You should display that how many indoor units are connected to the outdoor unit. Refer to the table below, then turn the arrow to appropriate position.

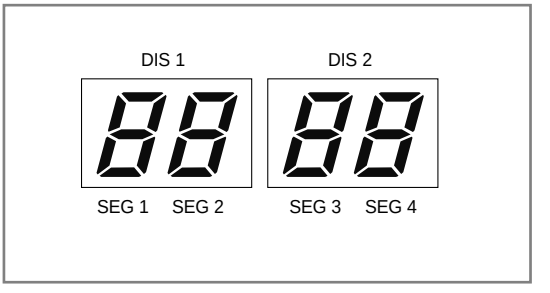
Switch No.	Number of indoor unit(s)	Switch No.	Number of indoor unit(s)
0 or 1	One	9	Nine
2	Two	A	Ten
3	Three	B	Eleven
4	Four	C	Twelve
5	Five	D	Thirteen
6	Six	E	Fourteen
7	Seven	F	Fifteen
8	Eight	-	-



■ KEY



■ Display



■ Summary of KEY functions

Function / Number of press times	K1 (Displayed on SEG 3, 4)	K2 (Displayed on SEG 3, 4)	K3 (Displayed on SEG 3, 4)	K4 (Displayed on SEG 3, 4)
1	Adding refrigerant at heating mode	Adding refrigerant at cooling mode	Reset	Displays data
2	Test operation at heating mode	Test operation at cooling mode	-	-
3	End	Pump Down for recovery of refrigerant	-	-
4	-	End	-	-

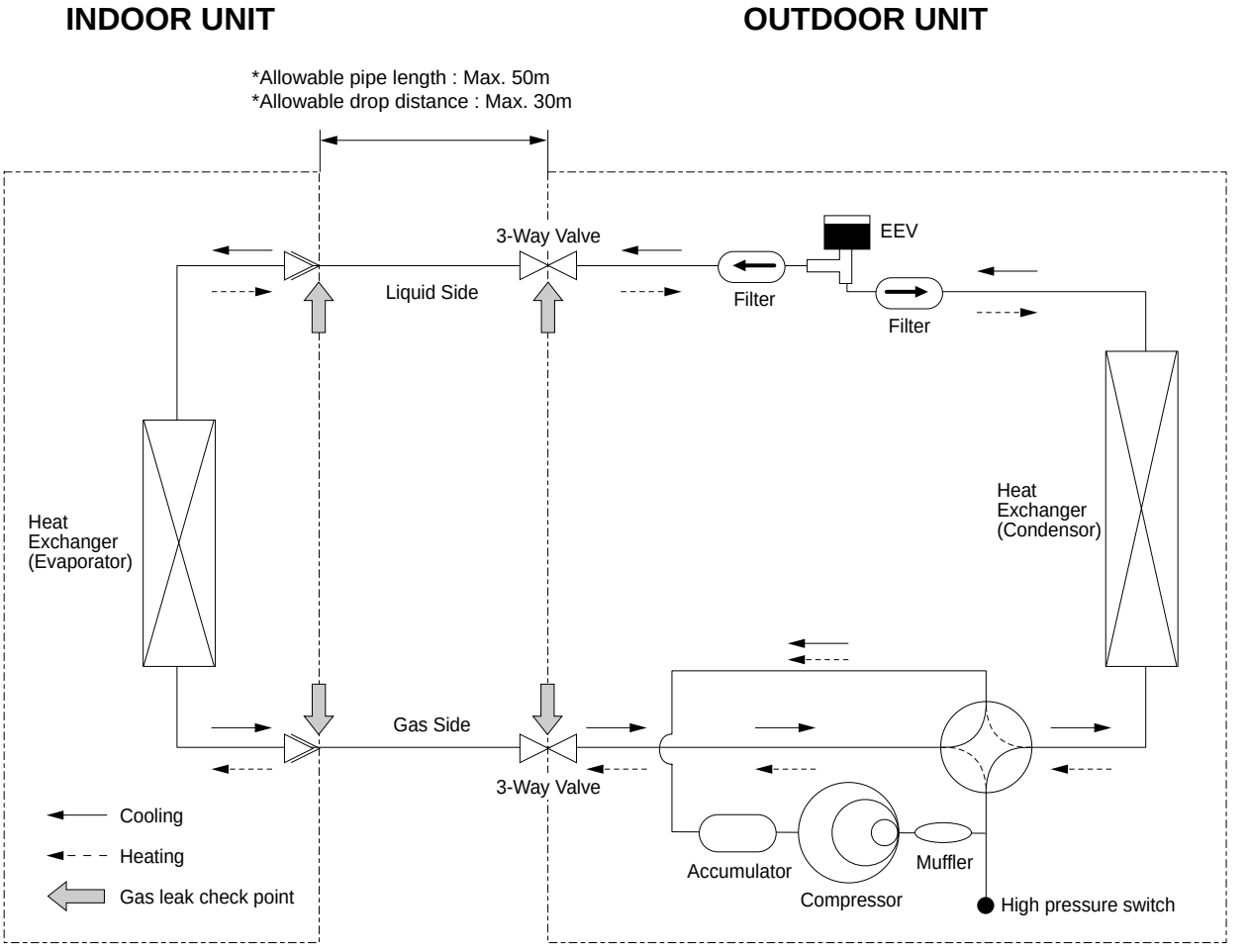
✻ Use the K1 only for heat pump models.

■ Reading data indicated on the display

KEY	Number of press	Item	Example	
			Display	Meaning
K1	1	Adding refrigerant for heat pump models	H1	
	2	Test operation for heat pump models	H2	
	3	End		
K2	1	Adding refrigerant for cooling only models	H3	
	2	Test operation for cooling only models	H4	
	3	Pump Down for recovery of refrigerant	H5	
	4	End		
K3		Reset		
K4	1		1	
	2		2	
	3(1)	Discharge temperature of compressor	31 10	110 °C
	4(2)	Temperature of outdoor heat exchanger	4 38	38 °C
	5(3)	Outdoor temperature	5 34	34 °C
	6(4)	Step of electronic expansion valve (0 step : all closed, 480 step : all open)	6 12	120STEP (12 x 10)
	7(5)	Temperature of evaporator	7- 2	-2 °C
			7 12	12 °C
	8(6)	Indoor temperature	8 22	22 °C
	9		9	
	10(7)	Stopping view mode & display communication data		

✻ ( ) is adjusted to HH105EZM/HH128EZM/HH140EZM models.

3. Refrigerating Cycle Diagram



4. Set Up the Model Option

4-1 Setting Option Setup Method

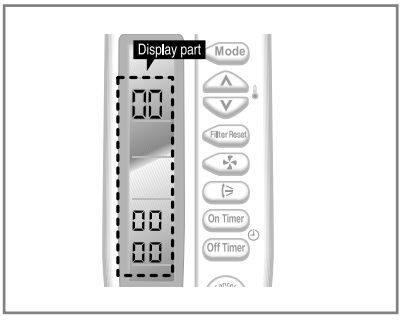
ex) Option No. : 0851151d2340

Step 1 : **Enter the Option Setup mode.**

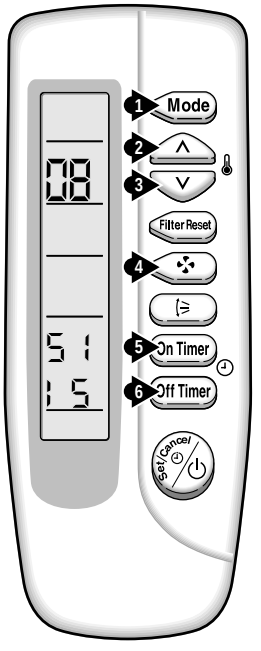
1st Take out the batteries of remote control.

2nd Press the temp. button simultaneously and insert the battery again.

3rd Make sure the remote control display shown as 00 00 00 .



Step 2 : **Enter the Option Setup mode and select your option according to the following procedure.**



* Setting is not required if you must 0 a value which has a 0 default.

1

The default value is 00 00 00 .
Otherwise, push the Mode button to 0 .
Every time you push the button, the display panel reads 1 or 0 repeatedly.

2

Push the button to set the display panel to 8 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

3

Push the button to set the display panel to 5 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

4

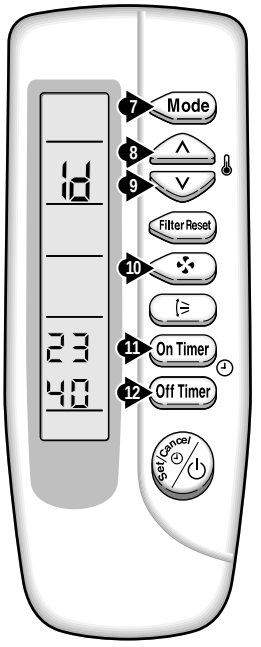
Push the button to set the display panel to 1 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

5

Push the On Timer button to set the display panel to 1 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

6

Push the Off Timer button to set the display panel to 5 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.



✻ Setting is not required if you must 0 a value which has a 0 default.

7 Press Mode button, then the default value is 10 88 .

8 Push the ∧ button to set the display panel to d .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

9 Push the ∨ button to set the display panel to 2 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

10 Push the button to set the display panel to 3 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

11 Push the On Timer button to set the display panel to 4 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

12 Push the Off Timer button to set the display panel to 0 .
Every time you push the button, the display panel reads 0 ➡ 1 ➡ 2 ➡ 3 ➡ · · · 9 ➡ A ➡ b ➡ c ➡ d ➡ E ➡ F repeatedly.

Step 3 : Upon completion of the selection, check you made right selections.

Press the Mode Selection key, Mode to set the display part to 0 and check the display part.

➡ The display part shows 08 51 15 .

Press the Mode Selection key, Mode to set the display part to 1 and check the display part.

➡ The display part shows 1d 23 40 .

Step 4 : Pressing the ON/OFF button ( )

When pressing the operation ON/OFF key with the direction of remote control for unit, the sound "Ding" or "Diriring" is heard and the OPERATION ICON( ) lamp of the display is flickering at the same time, then the input of option is completed. (If the diriring sound isn't heard, try again pressing the ON/OFF button.)

Step 5 : Unit operation test-run

First, Remove the battery from the remote control.

Second, Re-insert the battery into the remote control.

Third, Press ON/OFF button( ) with the direction of remote control for set.

• Error Mode

1st If all lamps of indoor unit are flickering, Plug out, plug in power plug again and press ON/OFF key to retry.

2nd If the unit is not working properly or all lamps are continuously flickering after setting the option code, see if the correct option code is set up for its model.

■ OPTION ITEMS

REMOTE CONTROL / MODEL	SEG1	SEG2	SEG3	SEG4	SEG5	SEG6	SEG7	SEG8	SEG9	SEG10	SEG11	SEG12
HH105EZM	0	1	5	4	4	2	1	F	0	0	0	0
HH128EZM HH140EZM	0	1	5	8	0	0	1	3	0	0	0	0
HH175EZM HH175ECM	0	1	5	8	0	0	1	4	0	0	0	0

5. Troubleshooting

■ **Detection of errors**

- If an error occurs during the operation, an LED flickers and the operation is stopped except the LED.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

5-1 LED Display on the receiver & display unit

■ **LED Display**

Abnormal conditions	Indicators					Operating
	Concealed Type (Blue)	Concealed Type (Red) / Standard Type				
	Standard Type					
Power reset	◑	×	×	×	×	
Error of temperature sensor in indoor unit (OPEN/SHORT)	×	×	◑	×	×	Displayed on appropriate indoor unit which is operating
Error of heat exchanger sensor in indoor unit(OPEN/SHORT)	◑	×	◑	×	×	Displayed on appropriate indoor unit which is operating
Error of outdoor temperature sensor Error of COND sensor Error of DISCHARGE sensor (OPEN/SHORT)	◑	×	×	◑	×	Displayed on appropriate indoor unit which is operating Displayed on outdoor unit
1. No communication for 2 minutes between indoor unit and outdoor unit (communication error for more than 2 minutes) 2. Indoor unit receiving the communication error from outdoor unit 3. Outdoor unit tracking 3 minute error 4. When sending the communication error from outdoor unit the mismatching of the communication numbers and installed numbers after completion of tracking. (communication error for more than 2 minutes)	×	×	◑	◑	×	1. Error of indoor unit: Displayed on the indoor unit regardless of operation 2. Error of outdoor unit: Displayed on the indoor unit which is operating
1. Communication error between indoors (Communication error for more than 2 minutes) 2. Slave of indoor unit tracking error	◑	×	×	×	◑	Error of indoor unit: Displayed on the indoor unit regardless of operation

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

● : On ◑ : Flickering × : Off

■ LED Display(cont.)

Abnormal conditions	Indicators					Operating
	Concealed Type					
	Blue	Red				
	Standard Type					
1. 2nd detection of high temperature COND 2. 2nd detection of high temperature DISCHARGE 3. Error of reverse phase	×	×	◑	◑	◑	Displayed on appropriate indoor unit which is operating Displayed on outdoor unit
Error of float switch	×	×	×	◑	◑	
Error of setting option switches for optional accessories	×	×	◑	×	◑	
EEPROM error	◑	×	◑	◑	×	
EEPROM option error	◑	◑	◑	◑	◑	

- If you turn off the air conditioner when the LED is flickering, the LED is also turned off.
- If you re-operate the air conditioner, it operates normally at first, then detect an error again.

● : On ◑ : Flickering × : Off

5-2 Outdoor Unit

If an error occurs during the operation, it is displayed on the outdoor unit PCB.

Display	Explanation	Remark
Er↔P0	High temperature of Discharge (Protection control)	Error about protection control of outdoor unit
Er↔P1	High temperature of outdoor heat exchanger (Protection control)	
Er↔P5	COMP DOWN to protect being frozen	
Er↔P6	Error of momentary power failure (disappears when the unit is Off/On)	
Er↔t1	Error of OUT TEMP sensor (OPEN/SHORT)	Errors about outdoor unit sensor (OPEN/SHORT) Detection during the operation of indoor unit (Sensing and sending errors into the communication data)
Er↔t2	Error of temperature sensor in outdoor heat exchanger (OPEN/SHORT)	
Er↔t3	Error of Discharge TEMP sensor (OPEN/SHORT)	
Er↔E1	System Down caused by communication error after completion of tracking	Communication and indoor unit errors
Er↔E2	Mismatching of the indoor unit numbers set with those communicated after completion of tracking	
Er↔E3	Error of float switch in indoor unit	Self-diagnosis of indoor and outdoor unit (x:indoor unit address)
Er↔E5	Error of setting option switches for optional accessories	
Er↔9x	OPEN/SHORT error of room sensor in indoor unit	
Er↔rx	OPEN/SHORT error of eva in sensor in indoor unit	
Er↔Ux	EEPROM option error	Displays of operating status
Er↔ux	Error of fan starting	
Er↔G4	Open error of electronic expansion valve in outdoor unit (Detected once or more times)	
Er↔G5	Close error of electronic expansion valve in outdoor unit (Detected once or more times)	
tU Flicker	Below -5°C when cooling (Outdoor temperature)	
tO Flicker	Over 30°C when heating (Outdoor temperature)	
K1, K2, K3, K4, K5 Flicker		

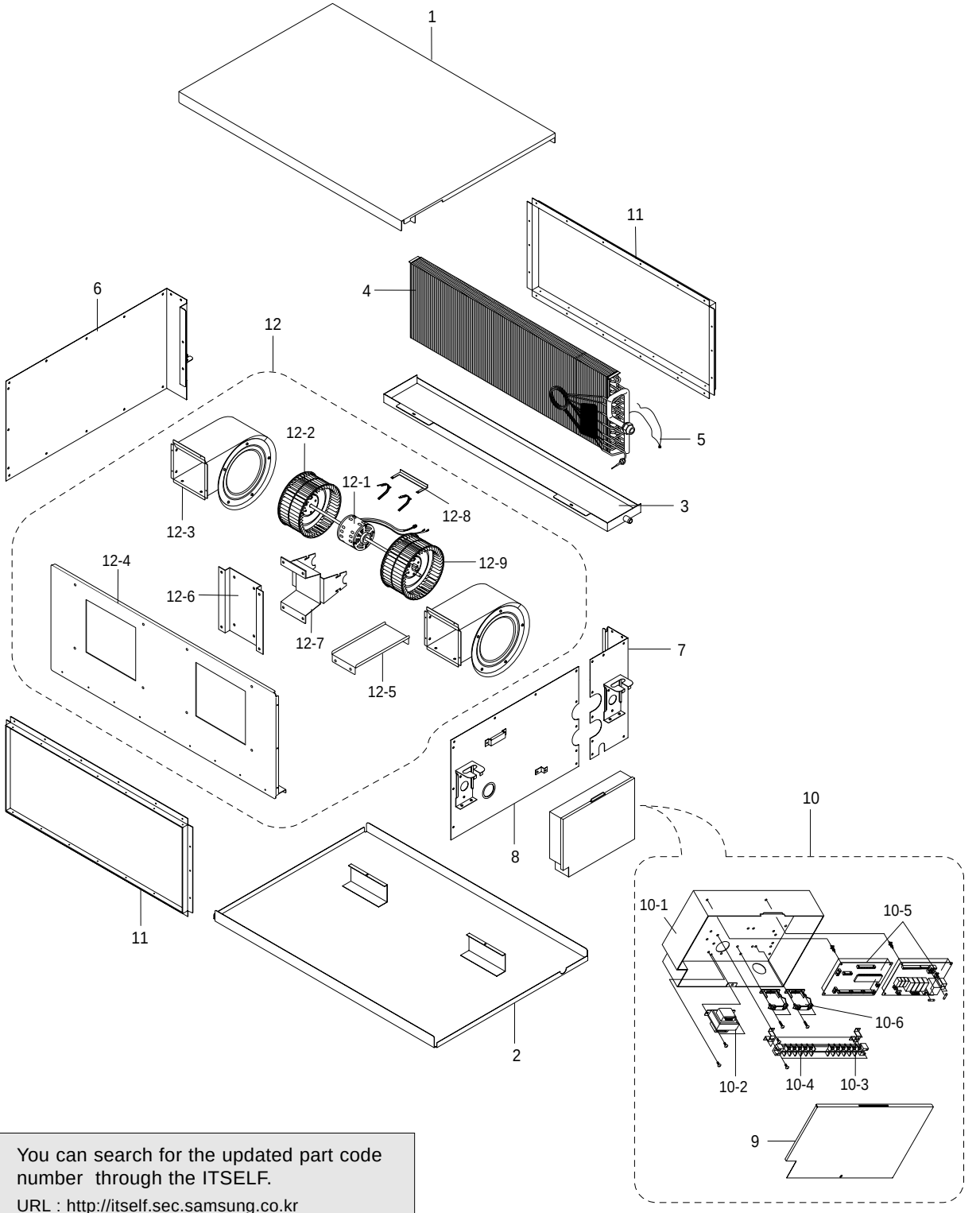
The order of priority : E1 → E2 → E4 → E5 → P0 → P1 → P5 → P6 → t1 → t2 → t3 → tu → to → G4 → G5 → E3 → qx → rx → vx → K1, K2, K3, K4, K5

- In case that the same error displays from multi-indoor units, the one having the faster address has the priority.

MEMO

6. Exploded Views and Parts List

6-1 Indoor Unit



You can search for the updated part code number through the ITSELF.

URL : http://itself.sec.samsung.co.kr

■ **Parts List(HH105EZM)**

No.	Code No.	Description	Specification	Q'TY	Remark
1	DB98-06745A	ASS'Y CABI TOP	HH105EZM, DUCT TYPE	1	
2	DB98-06744A	ASS'Y CABI BASE PART	HH105EZM, DUCT TYPE	1	
3	DB94-00093A	ASS'Y DRAIN PAN	HH105EZM, DUCT TYPE	1	
4	DB96-02934A	ASS'Y EVAP	HH105EZM, DUCT TYPE	1	
5	DB32-00016B	THERMISTOR-ASS'Y	HH105EZM, DUCT TYPE	1	
6	DB98-05296A	ASS'Y-CABI SIDE LF PART	HH105EZM, DUCT TYPE	1	
7	DB72-00499A	INSULATION-CABI SIDE LF B	HH105EZM, DUCT TYPE	1	
8	DB72-00498A	INSULATION-CABI SIDE LF A	HH105EZM, DUCT TYPE	1	
9	DB63-00080A	COVER-CONTROL	SGCC-M,T0.8	1	
10	DB93-01616D	ASS'Y CONTROL IN	220V, 50Hz, HH105EZM	1	
10-1	DB61-00098A	CASE-CONTROL	SGCC-M,T0.8	1	
10-2	DB26-10065B	TRANS-POWER	230V,50HZ	1	
10-3	DB65-00004H	TERMINAL BLOCK-6P	6p	1	
10-4	DB65-00004L	TERMINAL BLOCK-6P	6p	1	
10-5	DB93-00849L	ASS'Y PCB MAIN-DPM DUCT	DPM,PCB, HH105EZM	1	
10-6	DB61-40291B	HOLDER-WIRE	PP,BLK	2	
11	DB90-00315A	ASS'Y-BRACKET OUTLET	HH105EZM, DUCT TYPE	2	
12	DB94-00222A	ASS'Y BLOWER	HH105EZM, DUCT TYPE	1	
12-1	DB31-00145A	MOTOR FAN	OSME-2004SAC(S329)	1	
12-2	DB67-00117A	BLOWER LF	SGCC-M	1	
12-3	DB90-00313A	ASS'Y-HOUSING	HH105EZM, DUCT TYPE	2	
12-4	DB64-00529A	PANEL-DUCT	SGCC-M	1	
12-5	DB61-00911A	SUPPORT-MOTOR	SGCC-M,T1.6	1	
12-6	DB61-00541A	HOLDER-MOTOR	SGCC-M,W220xL200xT2.0	1	
12-7	DB61-20071A	BASE-MOTOR	HH105EZM, DUCT TYPE	1	
12-8	DB61-00540A	BRACKET-MOTOR GUIDE	SGCC-M,T1.6	1	
12-9	DB67-00117B	BLOWER-RH	SGCC-M	1	

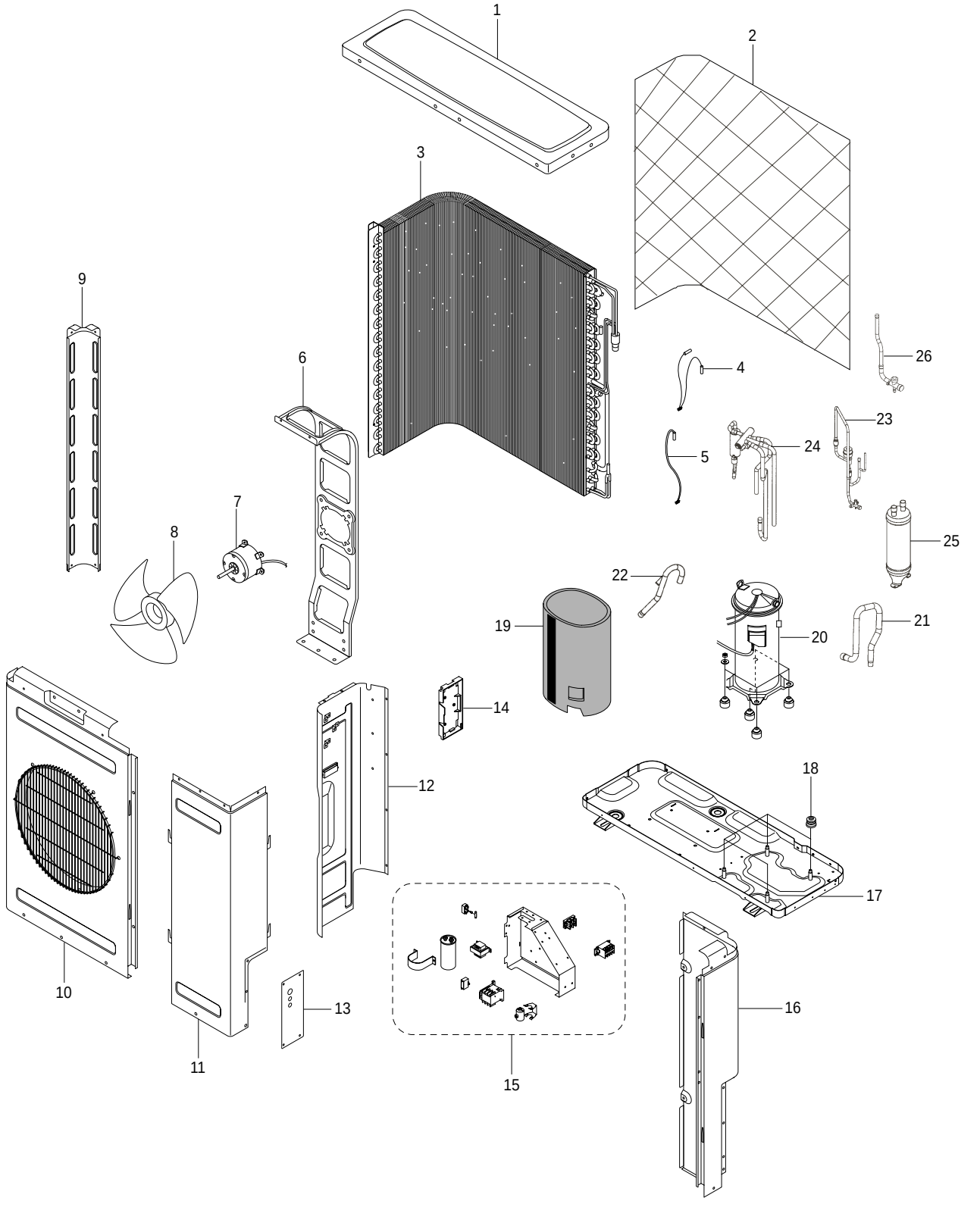
■ Parts List(HH128EZM / HH140EZM)

No.	Code No.	Description	Specification	Q'TY	Remark
1	DB98-06745A	ASS'Y CABI TOP	HH140EZM, DUCT TYPE	1	
2	DB98-06744A	ASS'Y CABI BASE PART	HH140EZM, DUCT TYPE	1	
3	DB94-00093A	ASS'Y DRAIN PAN	HH140EZM, DUCT TYPE	1	
4	DB96-02872A	ASS'Y EVAP	HH140EZM, DUCT TYPE	1	
5	DB32-00016B	THERMISTOR-ASSY	HH140EZM, DUCT TYPE	1	
6	DB98-05296A	ASS'Y-CABI SIDE LF PART	HH140EZM, DUCT TYPE	1	
7	DB72-00499A	INSULATION-CABI SIDE LF B	HH140EZM, DUCT TYPE	1	
8	DB72-00498A	INSULATION-CABI SIDE LF A	HH140EZM, DUCT TYPE	1	
9	DB63-00080A	COVER-CONTROL	SGCC-M,T0.8	1	
10	DB93-01616B	ASS'Y CONTROL IN	220V, 50Hz, HH140EZM	1	
10-1	DB61-00098A	CASE-CONTROL	SGCC-M,T0.8	1	
10-2	DB26-10065B	TRANS-POWER	230V,50HZ	1	
10-3	DB65-00004H	TERMINAL BLOCK-6P	6p	1	
10-4	DB65-00004L	TERMINAL BLOCK-6P	6p	1	
10-5	DB93-00849L	ASS'Y PCB MAIN-DPM DUCT	DPM,PCB, HH140EZM	1	
10-6	DB61-40291B	HOLDER-WIRE	PP,BLK	2	
11	DB90-00315A	ASS'Y-BRACKET OUTLET	HH140EZM, DUCT TYPE	2	
12	DB94-00222B	ASS'Y BLOWER	HH140EZM, DUCT TYPE	1	
12-1	DB31-00079E	MOTOR FAN	OSM-1604SAC(S324)	1	
12-2	DB67-00117A	BLOWER LF	SGCC-M	1	
12-3	DB90-00313A	ASS'Y-HOUSING	HH140EZM, DUCT TYPE	2	
12-4	DB64-00529A	PANEL-DUCT	SGCC-M	1	
12-5	DB61-00911A	SUPPORT-MOTOR	SGCC-M,T1.6	1	
12-6	DB61-00541A	HOLDER-MOTOR	SGCC-M,W220xL200xT2.0	1	
12-7	DB61-20071A	BASE-MOTOR	HH140EZM, DUCT TYPE	1	
12-8	DB61-00540A	BRACKET-MOTOR GUIDE	SGCC-M,T1.6	1	
12-9	DB67-00117B	BLOWER-RH	SGCC-M	1	

■ **Parts List(HH175EZM / HH175ECM)**

No.	Code No.	Description	Specification	Q'TY	Remark
1	DB98-05295A	ASS'Y CABI TOP	HH175EZM, DUCT TYPE	1	
2	DB98-05294A	ASS'Y CABI BASE PART	HH175EZM, DUCT TYPE	1	
3	DB94-00184A	ASS'Y DRAIN PAN	HH175EZM, DUCT TYPE	1	
4	DB96-02634B	ASS'Y EVAP	HH175EZM, DUCT TYPE	1	
5	DB32-00016B	THERMISTOR-ASSY	HH175EZM, DUCT TYPE	1	
6	DB98-05296A	ASS'Y-CABI SIDE LF PART	HH175EZM, DUCT TYPE	1	
7	DB72-00499A	INSULATION-CABI SIDE LF B	HH175EZM, DUCT TYPE	1	
8	DB72-00498A	INSULATION-CABI SIDE LF A	HH175EZM, DUCT TYPE	1	
9	DB63-00080A	COVER-CONTROL	SGCC-M, T0.8	1	
10	DB93-01616A	ASS'Y CONTROL IN	220V, 50Hz, HH175EZM	1	
10-1	DB61-00098A	CASE-CONTROL	SGCC-M, T0.8	1	
10-2	DB26-10065B	TRANS-POWER	230V, 50Hz	1	
10-3	DB65-00004H	TERMINAL BLOCK-6P	6P	1	
10-4	DB65-00004L	TERMINAL BLOCK-6P	6P	1	
10-5	DB93-00849D	ASS'Y PCB MAIN-DPM DUCT	DPM, PCB, HH175EZM	1	
10-6	DB61-40291B	HOLDER-WIRE	PP, BLK	2	
11	DB90-00751A	ASS'Y-BRACKET OUTLET	HH175EZM, DUCT TYPE	2	
12	DB94-00193A	ASS'Y BLOWER	HH175EZM, DUCT TYPE	1	
12-1	DB31-00142A	MOTOR FAN	OSME-3751SAC(S325)	1	
12-2	DB67-00206A	BLOWER LF	SGCC-M	1	
12-3	DB94-00185A	ASS'Y-HOUSING	HH175EZM, DUCT TYPE	2	
12-4	DB64-00495A	PANEL-DUCT	SGCC-M	1	
12-5	DB61-00911A	SUPPORT-MOTOR	SGCC-M, T1.6	1	
12-6	DB61-00541A	HOLDER-MOTOR	SGCC-M, W220xL200xT2.0	1	
12-7	DB61-20071A	BASE-MOTOR	HH175EZM, DUCT TYPE	1	
12-8	DB61-00919A	BRACKET-MOTOR GUIDE	SGCC-M, T1.6	1	
12-9	DB67-00206B	BLOWER-RH	SGCC-M	1	

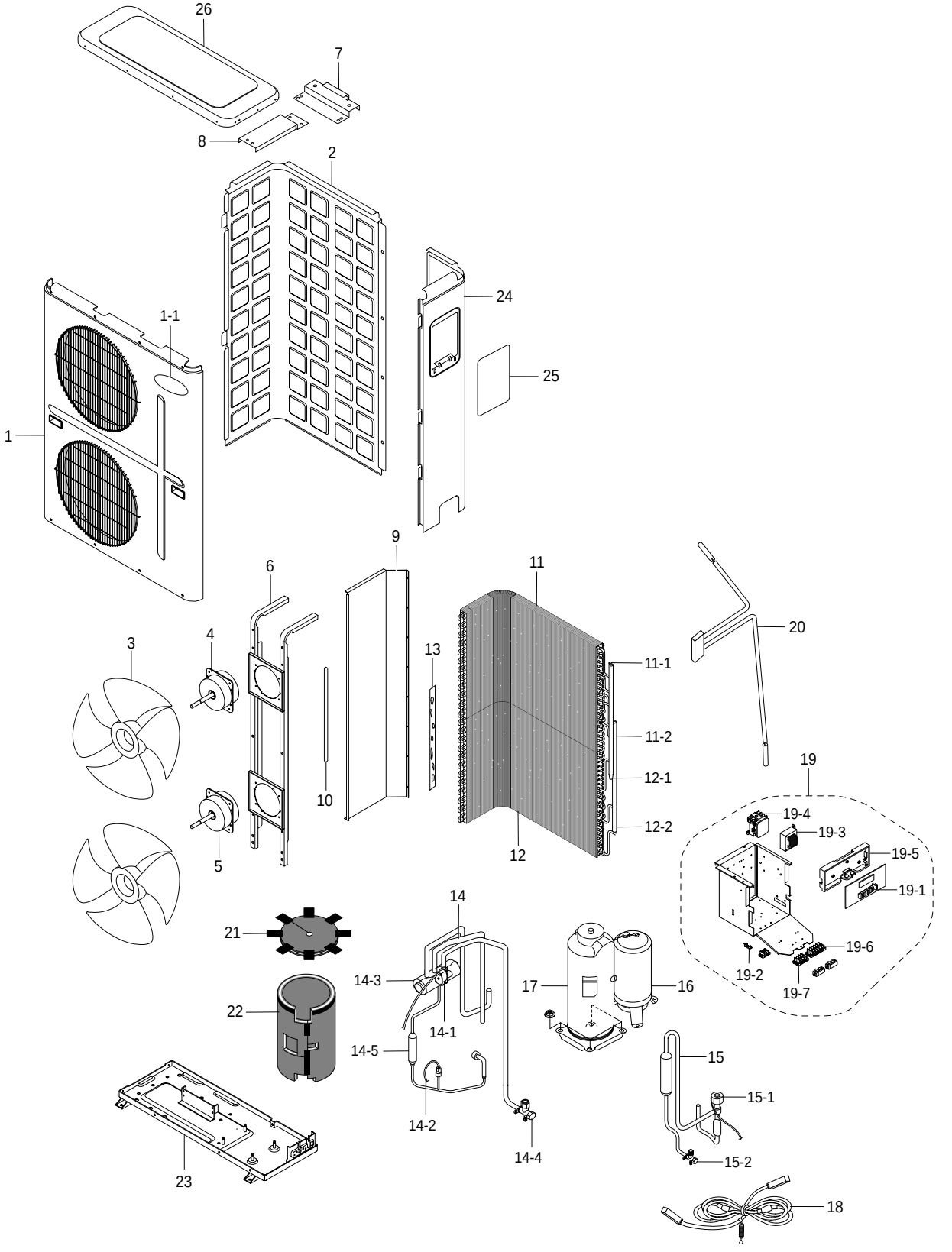
■ UH105GZM



■ **Parts List**

No.	Code No.	Description	Specification	Q'TY	Remark
1	DB90-01029B	ASS'Y CABINET-TOP	UH105GZM, ASS'Y(SECC-P)	1	
2	DB61-01348A	GUIDE-SCREEN	RVMPC035B2M0	1	
3	DB96-02724A	ASS'Y COND-UNIT	UH105GZM, 2x36	1	
4	DB32-00021H	THERMISTOR	-,10Kohm,-,-20~100,-,-,-,-,-	1	
5	DB32-00071A	THERMISTOR	-,-,-,-,-,-,-,-,RFPC020B2M0	1	
6	DB61-01173B	BRACKET MOTOR	UH105GZM,-,-,-,-,-,-	1	
7	DB31-00060P	MOTOR FAN-OSMED-1166SRC	OSME1166SRC, FAN MOTOR, 1.03/0.58,50	1	
			210/115,220,900/500,50,220,75deg, -,-		
8	DB67-00140A	FAN-PROPELLER	AS+GF 20%,BLK,OD460,B-PJT	1	
9	DB64-00857A	CABINET-BACK LF	RVMC035B2M0,SECCP,T1.0,W81,L947,-	1	
			WHITE GRAY,-		
10	DB90-01026A	ASS'Y-CABI FRONT LF	RVMPC035B2M0	1	
11	DB90-01224A	ASS'Y CABINET FRONT-RH	UH105GZM,ASS'Y	1	
12	DB94-00319A	ASS'Y PARTITION-OUT	RVMPC035B2M0	1	
13	DB90-01222A	ASS'Y-WIRE PLATE	UH105GZM,SECC-P,SC-90073T	1	
14	DB61-00152A	CASE-PCB-OUT	AE-240E,T2.5,ABS,-,-,BLK,-	1	
15	DB93-02266A	ASS'Y CONTROL OUT	HP,-,-,-,-,-,-,UH105GZM	1	
16	DB90-01223A	ASS'Y CABINET BACK-RH	UH105GZM,ASS'Y	1	
17	DB90-01030B	ASS'Y BASE OUT	UH105GZM,DPM 3.5HP OUTDOOR	1	
18	DB73-10023A	GROMMET-COMP	-,EPDM,T41,-,-,-,-,BLK,-	4	
19	DB72-00237A	INSULATION-SOUND	T12,W630,L390,-,-,-,ACH3600G	1	
20	DB95-00435A	ASS'Y-DIGITAL SCROLL COMP	UH105GZM,ZR45KC-TFD	1	
21	DB62-02004A	TUBE-SUCTION	-,UH105GZM,-,-,-,-,-	1	
22	DB96-02692A	ASS'Y TUBE-DISCHARGE	UH105GZM,-	1	
23	DB96-02693A	ASS'Y-EXPANSION VALVE	UH105GZM,-	1	
24	DB96-02694A	ASS'Y-4WAY VALVE	UH105GZM,-	1	
25	DB96-02695A	ASS'Y-ACCUMULATOR	UH105GZM,-	1	
26	DB96-02697A	ASS'Y-VALVE SERVICE	UH105GZM,-	1	

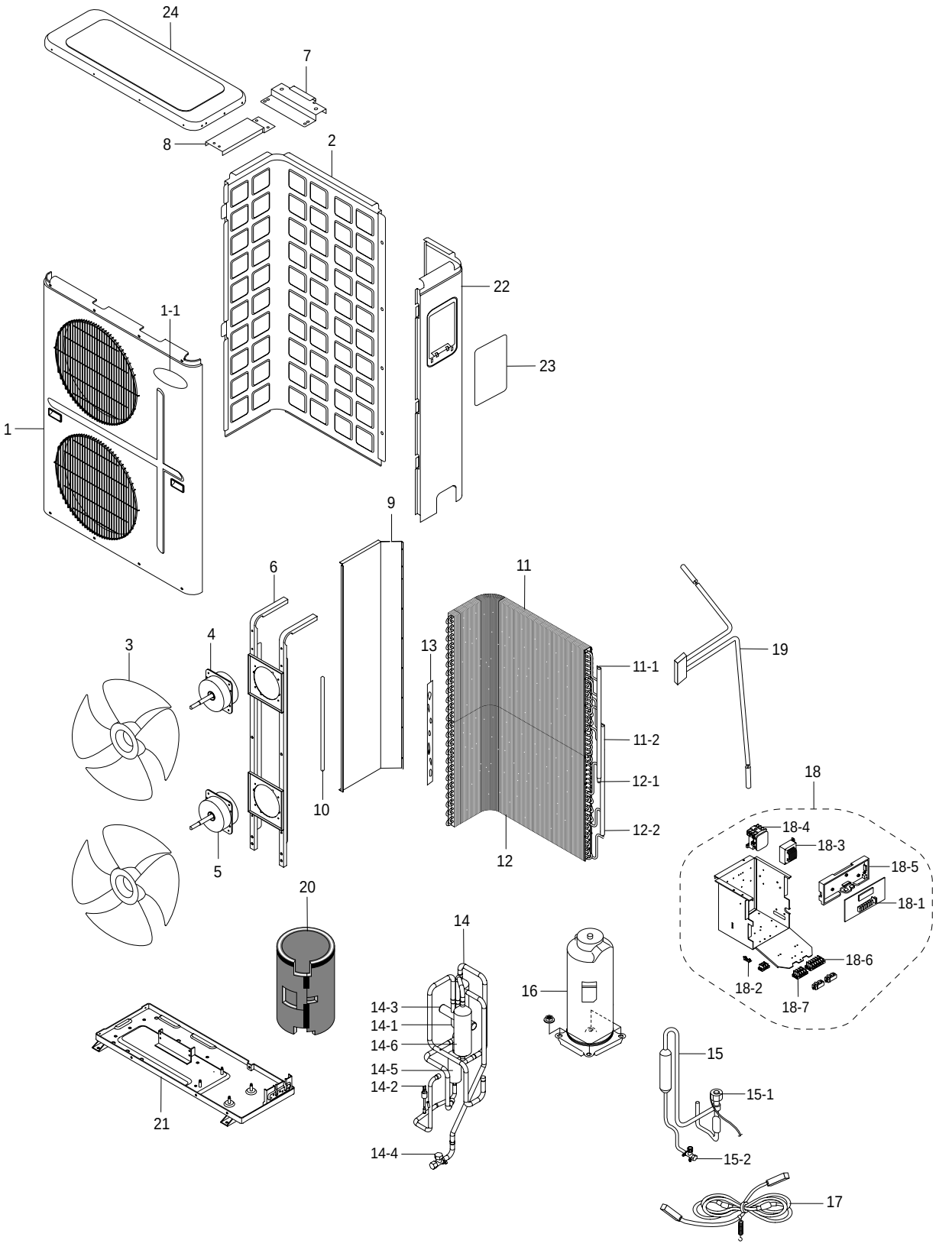
■ UH128GZM / UH140GZM



■ Parts List

No.	Code No.	Description	Specification	Q'TY
1	DB90-00250A	CABINET FRONT	ASS'Y CABINET FRONT	1
1-1	DB68-10612A	LABEL SAMSUNG	HARD PC, T0.5	1
2	DB90-00551A	ASS'Y CABI BACK-LF	ASS'Y CABINET BACK LF	1
3	DB67-50067A	FAN-PROPELLER	ABS+GF20,D495,4BLADE	2
4	DB31-00060L	MOTOR FAN	OSME-1156SRC,(S542)	1
5	DB31-00060M	MOTOR FAN	OSME-1156SRC,(S543)	1
6	DB61-00837A	BRACKET MOTOR	SGCC-M,T1.6	1
7	DB61-00398A	SUPPORTER-MOTOR	SGCC-M,T1.6	1
8	DB61-30615A	SUPPORTER-FRAME	SGCC-M,T1.2	1
9	DB67-30025A	PARTITION	SBHG1,T1	1
10	DB61-30365A	SUPPORTER-COND	SBHG1,T1.6	1
11	DB96-01259D	ASS'Y COND-UP	ASS'Y COND_UP	1
11-1	DB96-01052A	ASS'Y-COLLECTOR IN UP	CU, COLLECTOR IN UP	1
11-2	DB96-01056A	ASS'Y-COLLECTOR OUT UP	CU, COLLECTOR OUT UP	1
12	DB96-01258F	ASS'Y COND-LOW	ASS'Y COND_LOW	1
12-1	DB96-01053A	ASS'Y COLLECTOR IN LOW	UH140GZM,IN LOW	1
12-2	DB96-01057A	ASS'Y-COLLECTOR OUT LOW	UH140GZM,OUT LOW	1
13	DB61-30358B	SUPPORTER-UNIT OUT	SGCC-A,T1.2	1
14	DB96-02302A	ASS'Y-4WAY VALVE	UH140GZM, 4-WAY VALVE	1
14-1	DB33-00003J	SOLENOID VALVE	SAGINOMIYA	1
14-2	DB34-00021B	SWITCH-HIGH PRESSURE	220-240V,1~4A,33kgf/cm^{2}G	1
14-3	DB62-40019A	VALVE-4WAY	3/4INCH	1
14-4	DB62-40092A	VALVE-SERVICE	C3604,30KG/CM2G	1
14-5	DB67-00197A	MUFFLER	UH140GZM	1
15	DB96-02515A	ASS'Y-VALVE EXPANSION	UH140GZM,4WAY_CASSETTE_48K	1
15-1	DB62-00720A	VALVE EXPAN-ELEC.	EDM-50YH	1
15-2	DB62-40011F	VALVE-SERVICE	3/8 INCH	1
16	DB96-01055A	ASS'Y-ACCUMULATOR	UH140GZM,ACCUM	1
17	DB95-10057J	ASS'Y-COMP-SCROLL	ZR61KC-TFD	1
18	DB95-30013V	ASS'Y HEATER-COMP	UH140GZM	1
19	DB93-01156D	ASS'Y CONTROL OUT	UH140GZM	1
19-1	PE-DPM5HP-05	ASS'Y PCB PARTS	PE-DPM5HP-05	1
19-2	3601-000438	FUSE-CARTRIDGE	250V,15A,SLOW-BLOW,CERAMIC,6.35x31.8mm	1
19-3	DB26-10070A	TRANS-POWER	DC17,AC230,DC17,DC0.6A	1
19-4	DB34-90090A	SWITCH-MAGNET	FURNAS,-,3P+1P,APH450PG,42AF35	1
19-5	DB61-00152A	CASE-PCB-OUT	AE-240E,T2.5,ABS,BLK	1
19-6	DB65-00074C	TERMINAL BLOCK-8P	UH140GZM	1
19-7	DB65-40062L	TERMINAL BLOCK-2P	UH140GZM	1
20	DB32-00021E	THERMISTOR-ASS'Y OUT	103AT,-20~+100,-,5V	1
21	DB72-00560B	INSULATION-SOUND TOP	MUF-0911,FELT,T12	1
22	DB72-00560A	INSULATION-SOUND	MUF-0911,FELT,T12	1
23	DB90-00247C	ASS'Y BASE OUT	UH140GZM	1
24	DB90-00550A	ASS'Y CABI BACK-RH	UH140GZM	1
25	DB90-00144A	ASS'Y COVER-CONTROL	ASM-3500A	1
26	DB90-00626A	ASS'Y CABI-TOP	UH140GZM	1

■ UH175GZM / UH175GCM



■ **Parts List**

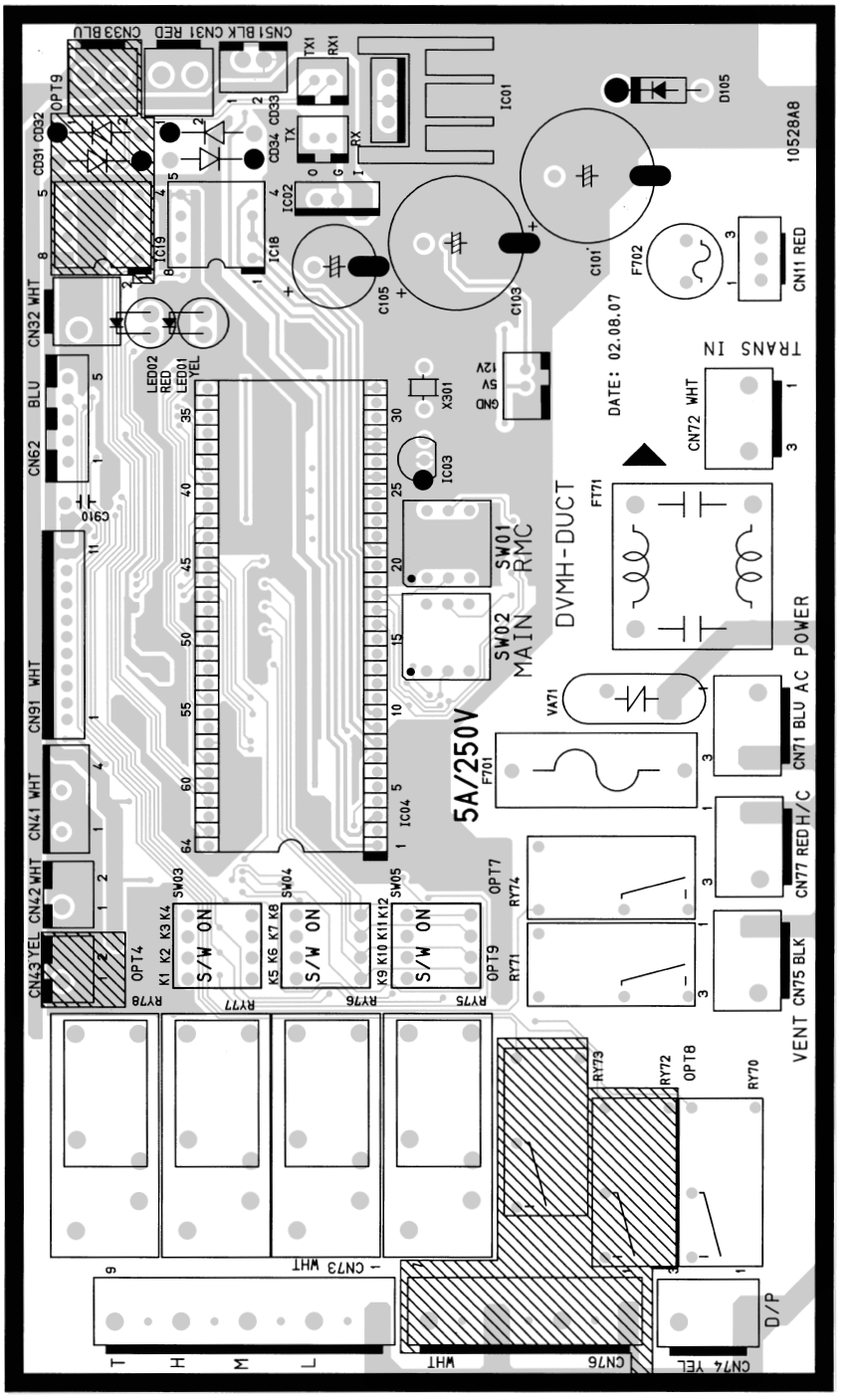
No.	Code No.	Description	Specification	Q'TY	
				UH175GCM	UH175GZM
1	DB90-00250A	CABINET FRONT	ASS'Y CABINET FRONT	1	1
1-1	DB68-10612A	LABEL SAMSUNG	HARD PC, T0.5	1	1
2	DB90-00551A	ASS'Y CABI BACK-LF	ASS'Y CABINET BACK LF	1	1
3	DB67-50067A	FAN-PROPELLER	ABS+GF20, D495, 4BLADE	2	2
4	DB31-00060L	MOTOR FAN	ASME-1156SRC, (S542)	1	1
5	DB31-00060M	MOTOR FAN	ASME-1156SRC, (S543)	1	1
6	DB61-00837A	BRACKET MOTOR	SGCC-M, T1.6	1	1
7	DB61-00398A	SUPPORTER-MOTOR	SGCC-M, T1.6	1	1
8	DB61-30615A	SUPPORTER-FRAME	SGCC-M, T1.2	1	1
9	DB67-30025A	PARTITION	SBHG1, T1.0	1	1
10	DB61-30365A	SUPPORTER-COND	SBHG1, T1.6	1	1
11	DB96-01259D	ASS'Y COND-UP	ASS'Y COND-UP	1	1
11-1	DB96-01052A	ASS'Y-COLLECTOR IN UP	CU, COLLECTOR IN UP	1	1
11-2	DB96-01056A	ASS'Y-COLLECTOR OUT UP	CU, COLLECTOR OUT UP	1	1
12	DB96-01258D	ASS'Y COND-LOW	ASS'Y COND-LOW	1	1
12-1	DB96-01053A	ASS'Y COLLECTOR IN LOW	UH175GCM, IN LOW	1	1
12-2	DB96-01057A	ASS'Y COLLECTOR OUT LOW	UH175GCM, OUT LOW	1	1
13	DB61-30358B	SUPPORTER-UNIT OUT	SGCC-A, T1.2	1	1
14	DB96-02226A	ASS'Y-4-WAY VALVE	UH175GCM, 4-WAY VALVE	1	-
	DB96-02674A	ASS'Y-4-WAY VALVE	UH175GZM, 4-WAY VALVE	-	1
14-1	DB33-00003J	SOLENOID VALVE	SAGINOMIYA	1	1
14-2	DB34-00021B	SWITCH-HIGH RRESSURE	220-240, 1~4A, 33KGF/øG	1	1
14-3	DB62-40019A	VALVE-4WAY	3/4 INCH	1	1
14-4	DB62-00450A	VALVE-SERVICE	C3604, 30KG/CM2G	1	-
	DB62-40092A	VALVE-SERVICE	C3604, 30KG/CM2G	-	1
14-5	DB67-00197A	MUFFLER	UH175GCM	1	1
14-6	DB67-10042A	ACCUMULATOR	UH175GCM, ACCUM	1	1
15	DB96-02241A	ASS'Y-VALVE EXPANSION	UH175GCM, 4WAY-CASSETTE-48K	1	-
	DB96-02819A	ASS'Y-VALVE EXPANSION	UH175GZM, 4WAY-CASSETTE-48K	-	1
15-1	DB62-01251A	VALVE EXPAN-ELEC	EDM-60YP	1	-
	DB62-00811A	VALVE EXPAN-ELEC	EDM-60YH	-	1
15-2	DB62-00425A	VALVE-SERVICE	3/8 INCH	1	-
	DB62-40011F	VALVE-SERVICE	3/8 INCH	-	1
16	DB95-00336A	ASS'Y-COMP-SCROLL	ZR72KC-TFD	1	-
	DB95-00418A	ASS'Y-COMP-SCROLL	ZR72KC-TFD	-	1
17	DB95-30013S	ASS'Y HEATER-COMP	UH175GCM	1	1
18	DB93-01156C	ASS'Y CONTROL OUT	UH175GCM/UH175GZM	1	1
18-1	DB93-02074A	ASS'Y PCB PARTS	PE-DPM5HP-03	1	-
	DB93-02343A	ASS'Y PCB PARTS	PE-DPM5HP-06	-	1
18-2	3601-000438	FUSE-CARTRIDGE	250V, 15A, SLOW-BLOW, CERAMIC, 6.35x31.8mm	1	1
18-3	DB26-10070A	TRANS-POWER	DC17, AC230, DC17, DC0.6A	1	1
18-4	3501-001231	SWITCH-MAGNET	220V, 50Hz, UH175GCM	1	1
18-5	DB61-00152A	CASE-PCB-OUT	AE-240E, T2.5, ABS, BLK	1	1
18-6	DB65-00074C	TERMINAL BLOCK-8P	UH175GCM	1	1
18-7	DB65-40062L	TERMINAL BLOCK-2P	UH175GCM	1	1
19	DB32-00021E	THERMISTOR-ASSY OUT	103AT, -20~+100, -, 5V	1	1
20	DB62-01793A	INSULATION-COMP SOUND	MUF-0911, FEKTM T12	1	1
21	DB90-00247A	ASS'Y BASE OUT	UH175GCM	1	1
22	DB90-01125A	ASS'Y CABI BACK-RH	UH175GCM	1	1
23	DB90-00144A	ASS'Y COVER-CONTROL	ASM-3500A	1	1
24	DB90-00626A	ASS'Y CABI-TOP	UH175GCM	1	1

7. PCB Diagram

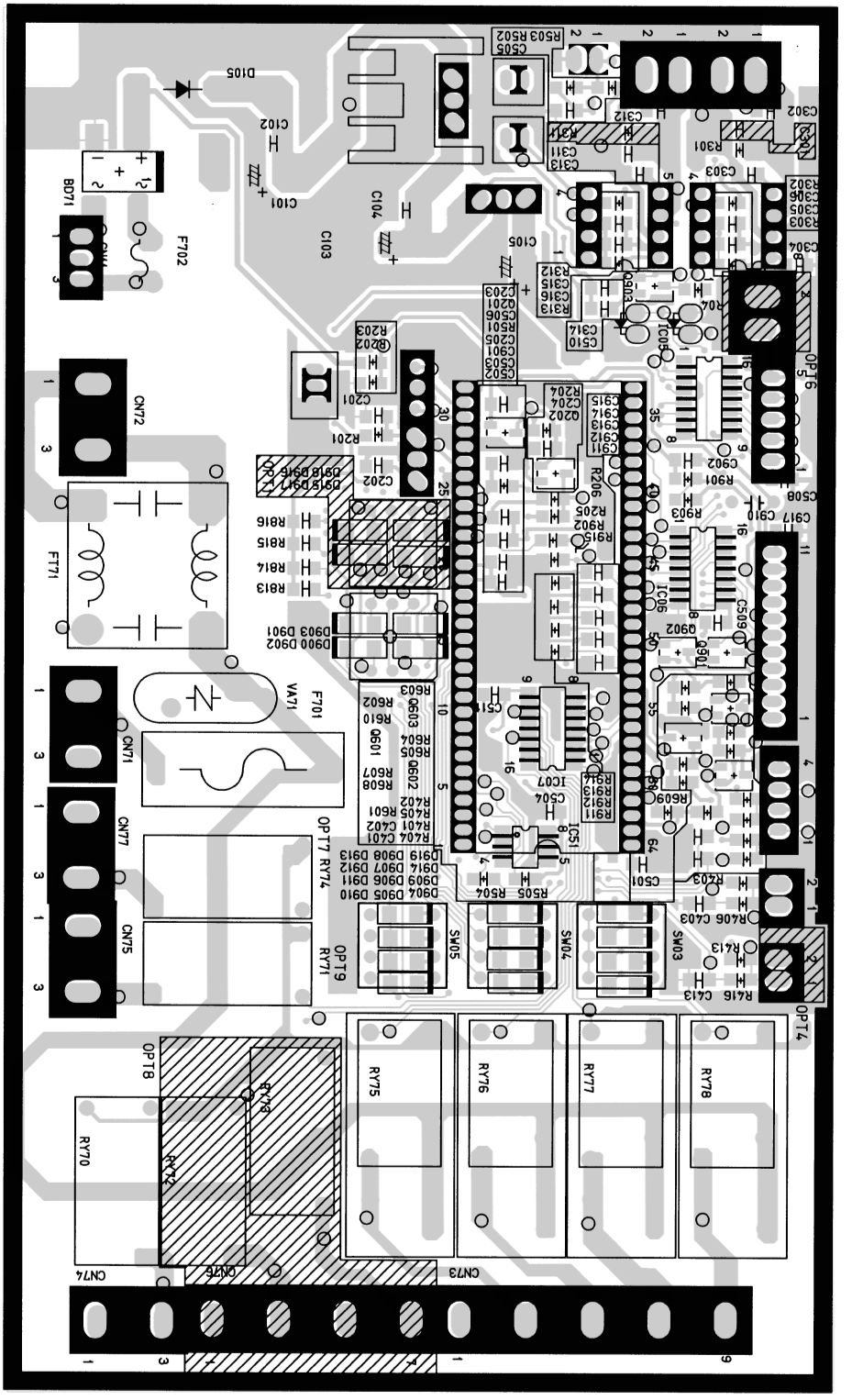
7-1 Indoor Unit

7-1-1 HH105EZM(Code No : DB93-00849M)
HH128EZM / HH140EZM(Code No : DB93-00849L)
HH175EZM / HH175ECM(Code No : DB93-00849D)

■ **TOP**



■ BOTTOM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C102
C101
BD71
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C103
C104
C105
R503 R502
C505
C312
R311
C311
C313
R301
C302
C303
C304
C305
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IC05
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D903 D901
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F701
CN71
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IC07
IC51
C501
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R416 C413
OPT4
CN77
CN75
OPT7 RY74
OPT9 RY71
D904 D905 D910
D909 D906 D911
D914 D907 D912
D919 D908 D913
R404 C401
R403 C402
R405 R601
R402
R401
SW05
SW04
SW03
OPT8
RY79
RY72
RY70
RY75
RY76
RY77
RY78
CN74
CN76
CN73

■ Parts List

Location No.	Description	Specification
BD71	DIODE BRIDGE	DF06S
C101	C-ELEC	2200uF 35V
C102	C-CHIP	CS2012Y 5V 104Z5
C103	C-ELEC	2200uF 25V
C104	C-CHIP	CS2012Y 5V 104Z5
C105	C-ELEC	SD 470uF,25V
C201	C-CHIP	CS2012Y 5V 104Z5
C202	C-CHIP	CS2012Y 5V 104Z5
C203	C-CHIP	CS2012Y 5V 104Z5
C204	C-CHIP	CS2012 5V 103Z5
C205	C-CHIP	CS2012 5V 103Z5
C301	C-CHIP	CS2012 5V 103Z5
C302	C-CHIP	CS2012Y 5V 104Z5
C303	C-CHIP	CS2012Y 5V 104Z5
C304	C-CHIP	CS2012Y 5V 104Z5
C305	C-CHIP	CS2012Y 5V 104Z5
C306	C-CHIP	CS2012Y 5V 104Z5
C311	C-CHIP	CS2012 5V 103Z5
C312	C-CHIP	CS2012Y 5V 104Z5
C313	C-CHIP	CS2012Y 5V 104Z5
C314	C-CHIP	CS2012Y 5V 104Z5
C315	C-CHIP	CS2012Y 5V 104Z5
C316	C-CHIP	CS2012Y 5V 104Z5
C401	C-CHIP	CS2012Y 5V 104Z5
C402	C-CHIP	CS2012Y 5V 104Z5
C403	C-CHIP	CS2012Y 5V 104Z5
C413	C-CHIP	CS2012Y 5V 104Z5
C501	C-CHIP	CS2012Y 5V 104Z5
C502	C-CHIP	CS2012Y 5V 104Z5
C503	C-CHIP	CS2012Y 5V 104Z5
C504	C-CHIP	CS2012Y 5V 104Z5
C505	C-CHIP	CS2012Y 5V 104Z5
C506	C-CHIP	CS2012Y 5V 104Z5
C508	C-CHIP	CS2012Y 5V 104Z5
C509	C-CHIP	CS2012Y 5V 104Z5
C510	C-CHIP	CS2012Y 5V 104Z5
C511	C-CHIP	CS2012Y 5V 104Z5
C901	C-CHIP	CS2012X 7R 102K5
C902	C-CHIP	CS2012Y 5V 104Z5
C910	C-FILM	2A 472J
C911	C-CHIP	CS2012 5V 103Z5
C912	C-CHIP	CS2012 5V 103Z5
C913	C-CHIP	CS2012 5V 103Z5
C914	C-CHIP	CS2012 5V 103Z5
C915	C-CHIP	CS2012 5V 103Z5
C917	C-CHIP	CS2012Y 5V 104Z5

■ **Parts List(cont.)**

Location No.	Description	Specification
CD31	DIODE-TVS	SAC5.0
CD32	DIODE-TVS	SAC5.0
CD33	DIODE-TVS	SAC5.0
CD34	DIODE-TVS	SAC5.0
CN11	CONNECTOR	SMW250-03 RED
CN31	CONNECTOR	YW396-02V RED
CN32	CONNECTOR	YW396-02V WHT
CN33	CONNECTOR	YW396-02V BLU
CN41	CONNECTOR	SMW250-04 WHT
CN51	CONNECTOR	SMW250-02 BLK
CN71	CONNECTOR	YW396-03AV BLU
CN72	CONNECTOR	YW396-03AV WHT
CN73	CONNECTOR	YW396-09AV WHT
CN74	CONNECTOR	YW396-03AV YEL
CN75	CONNECTOR	YW396-03 BLK
CN77	CONNECTOR	YW396-03 RED
CN91	CONNECTOR	SMW200-11 WHT
D105	DIODE-RECT	IN4007
D900	DIODE	4148M
D901	DIODE	4148M
D902	DIODE	4148M
D903	DIODE	4148M
D904	DIODE	4148M
D905	DIODE	4148M
D906	DIODE	4148M
D907	DIODE	4148M
D908	DIODE	4148M
D909	DIODE	4148M
D910	DIODE	4148M
D911	DIODE	4148M
D912	DIODE	4148M
D913	DIODE	4148M
D914	DIODE	4148M
D915	DIODE	4148M
D916	DIODE	4148M
D917	DIODE	4148M
D918	DIODE	4148M
D919	DIODE	4148M
F701	FUSE	250V, 5A
F701	HOLDER FUSE	FB58-20
F702	FUSE	250V, 1A
FT71	FILTER NOISE	HP1-P10
IC01	HEAT SINK	A6063,L25.5 W15,WHT
IC01	IC VOLT REGULATOR	KA7812A
IC01	SCREW-TAPPING	PH,M3,L8,FE FZY
IC02	IC VOLT REGULATOR	KA7805A

■ **Parts List(cont.)**

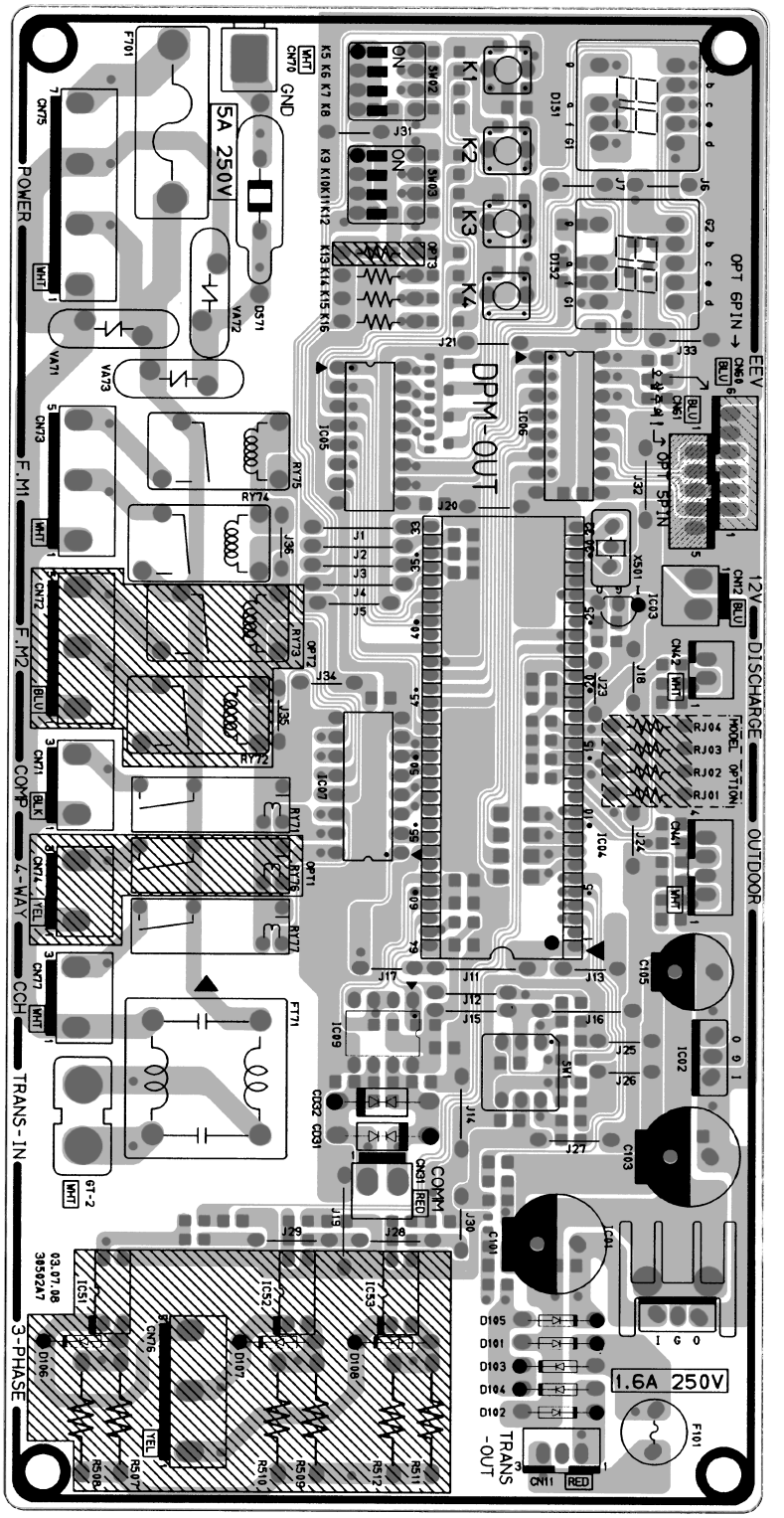
Location No.	Description	Specification
IC03	IC-RESET	KA7533Z
IC04	IC - MCU	MB89635
IC05	IC DRIVE	ULN2003AFW
IC06	IC DRIVE	ULN2003AFW
IC07	IC DRIVE	ULN2003AFW
IC18	IC-BUS TRANSCEIVER	MAX485
IC19	IC-BUS TRANSCEIVER	MAX485
IC51	EEPROM	93LC56B-1/SN
LED01	LED LAMP	SY5511 YEL
LED02	LED LAMP	SR5511 RED
Q201	TR SMALL SIGNAL	2SC2412K
Q202	TR SMALL SIGNAL	2SC2412K
Q601	TR SMALL SIGNAL	2SC2412K
Q602	TR SMALL SIGNAL	2SC2412K
Q603	TR SMALL SIGNAL	MMST2907A
Q901	TR DIGITAL	DTA114EKA
Q902	TR DIGITAL	DTA114EKA
Q903	TR DIGITAL	DTA114EKA
R04	R-CHIP	R2012 1kΩ±5
R201	R-CHIP	R2012 1kΩ±5
R202	R-CHIP	R2012 3.3kΩ±5
R203	R-CHIP	R2012 10kΩ±5
R204	R-CHIP	R2012 1kΩ±5
R205	R-CHIP	R2012 1kΩ±5
R206	R-CHIP	R2012 1kΩ±5
R302	R-CHIP	R2012 10kΩ±5
R303	R-CHIP	R2012 10kΩ±5
R312	R-CHIP	R2012 10kΩ±5
R313	R-CHIP	R2012 10kΩ±5
R401	R-CHIP	R2012 6.8kΩ±1
R402	R-CHIP	R2012 6.8kΩ±1
R403	R-CHIP	R2012 6.8kΩ±1
R404	R-CHIP	R2012 330Ω±5
R405	R-CHIP	R2012 330Ω±5
R406	R-CHIP	R2012 330Ω±5
R413	R-CHIP	R2012 24kΩ±1
R416	R-CHIP	R2012 330Ω±5
R501	R-CHIP	R2012 10kΩ±5
R502	R-CHIP	R2012 330Ω±5
R503	R-CHIP	R2012 10kΩ±5
R504	R-CHIP	R2012 47kΩ±5
R505	R-CHIP	R2012 47kΩ±5
R601	R-CHIP	R2012 1kΩ±5
R602	R-CHIP	R2012 10kΩ±5
R603	R-CHIP	R2012 1kΩ±5
R604	R-CHIP	R2012 470Ω±5

■ **Parts List(cont.)**

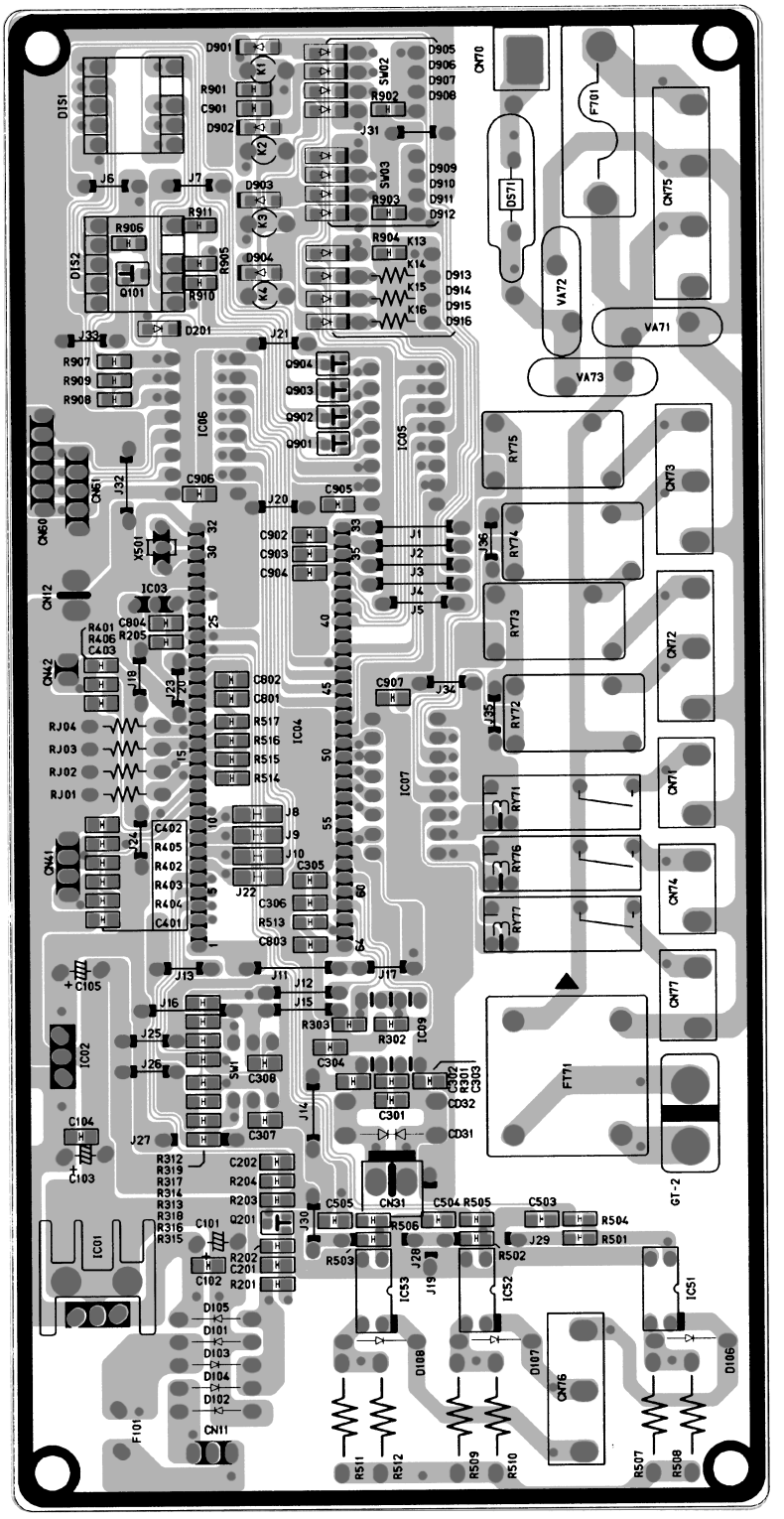
Location No.	Description	Specification
R605	R-CHIP	R2012 470Ω±5
R607	R-CHIP	R2012 1kΩ±5
R608	R-CHIP	R2012 10kΩ±5
R609	R-CHIP	R2012 10kΩ±5
R610	R-CHIP	R2012 3.3kΩ±5
R813	R-CHIP	R2012 1kΩ±5
R814	R-CHIP	R2012 1kΩ±5
R815	R-CHIP	R2012 1kΩ±5
R816	R-CHIP	R2012 1kΩ±5
R901	R-CHIP	R2012 330Ω±5
R902	R-CHIP	R2012 1kΩ±5
R903	R-CHIP	R2012 10kΩ±5
R911	R-CHIP	R2012 10kΩ±5
R912	R-CHIP	R2012 10kΩ±5
R913	R-CHIP	R2012 10kΩ±5
R914	R-CHIP	R2012 10kΩ±5
R915	R-CHIP	R2012 10kΩ±5
RY70	RELAY	JQ1a-12V
RY71	RELAY	JQ1a-12V
RY74	RELAY	JQ1a-12V
RY75	RELAY	CS11-12SH
RY76	RELAY	CS11-12SH
RY77	RELAY	CS11-12SH
RY78	RELAY	CS11-12SH
SW01	DIGITAL-SWITCH	PT65 103
SW02	DIGITAL-SWITCH	PT65 503
SW03	DIP-SWITCH	BSD-104
SW04	DIP-SWITCH	BSD-104
SW05	DIP-SWITCH	BSD-104
VA71	VARISTOR	INR14D561K-BS
X301	RESONATOR	10MHz

7-2-1 UH105GZM(Code No : DB93-01885A)

■ **TOP**



■ BOTTOM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RJ01
RJ02
RJ03
RJ04

■ Parts List

Location No.	Description	Specification
C101	C-AL	1000uF,20%,35V,GP,TP,13x25,5
C102	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C103	C-AL	1000uF,20%,35V,GP,TP,13x25,5
C104	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C105	C-AL	470uF,20%,25V,GP,TP,10x12.5mm
C201	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C202	C-CERAMIC,CHIP	10nF,+80-20%,50V,Y5V,TP,2012
C301	C-CERAMIC,CHIP	10nF,+80-20%,50V,Y5V,TP,2012
C302	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C303	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C304	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C305	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C306	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C307	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C308	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C401	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C402	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C403	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C503	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C504	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C505	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C801	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C802	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C803	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C804	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C901	C-CERAMIC,CHIP	10nF,+80-20%,50V,Y5V,TP,2012
C902	C-CERAMIC,CHIP	10nF,+80-20%,50V,Y5V,TP,2012
C903	C-CERAMIC,CHIP	10nF,+80-20%,50V,Y5V,TP,2012
C904	C-CERAMIC,CHIP	10nF,+80-20%,50V,Y5V,TP,2012
C905	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C906	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C907	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
CD31	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15
CD32	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15
CN11	CONNECTOR-HEADER	BOX,3P,1R,2.5mm,STRAIGHT,SN
CN12	CONNECTOR-HEADER	1WALL,2P,1R,3.96mm,STRAIGHT,SN
CN31	CONNECTOR-HEADER	1WALL,2P,1R,3.96mm,STRAIGHT,SN
CN41	CONNECTOR-HEADER	BOX,4P,1R,2.5mm,STRAIGHT,SN
CN42	CONNECTOR-HEADER	BOX,2P,1R,2.5mm,STRAIGHT,SN
CN60	CONNECTOR-HEADER	BOX,6P,1R,2.5mm,STRAIGHT,SN
CN61	CONNECTOR-HEADER	BOX,5P,1R,2.5mm,STRAIGHT,SN
CN70	CONNECTOR-HEADER	BOX,1P,1R,6mm,STRAIGHT,NI,WHT
CN71	CONNECTOR-HEADER	1WALL,2P,1R,7.92mm,STRAIGHT,SN,BL
CN72	CONNECTOR-HEADER	1WALL,3P,1R,7.92mm,STRAIGHT,SN,BL
CN73	CONNECTOR-HEADER	1WALL,3P,1R,7.92mm,STRAIGHT,SN,WH
CN74	CONNECTOR-HEADER	1WALL,2P,1R,7.92mm,STRAIGHT,SN,YE

■ **Parts List(cont.)**

Location No.	Description	Specification
CN75	CONNECTOR-HEADER	1WALL,4P,1R,7.92mm,STRAIGHT,SN,WH
CN76	CONNECTOR-HEADER	1WALL,3P,1R,7.92mm,STRAIGHT,SN,YE
CN77	CONNECTOR-HEADER	1WALL,2P,1R,7.92mm,STRAIGHT,SN,WH
D101	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D102	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D103	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D104	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D105	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D106	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D107	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D108	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D201	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D901	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D902	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D903	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D904	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D905	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D906	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D907	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D908	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D909	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D910	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D911	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D912	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D913	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D914	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D915	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
D916	DIODE-SWITCHING	RLS4148,100V,200MA,SOD-80C,TP
DIS1	LED DISPLAY-7SEG	ELD-306GWA,-,2,14,-,15x15.5x7.2,G
DIS2	LED DISPLAY-7SEG	ELD-306GWA,-,2,14,-,15x15.5x7.2,G
DS71	POSISTOR	DSA-332MA,2pF MAX,100MOhm,ASM-3
F101	FUSE	250V,1.6A,TIME-LAG,PLASTIC,8.4x7.6mm
F701	FUSE-BLOCK	500V,-,100M
F701_1	FUSE-CARTRIDGE	250V,5A,FAST-ACTING,GLASS,5.2x20mm
FT71	FILTER-EMI AC LINE	250V,1A,UL/CSA/TUV/SEMKO,100000
GT-2	CONNECTOR-TERMINAL	PIN,MALE,#18-22,2.35mm
IC01	IC-POSI.FIXED REG.	7812A,TO-220,3P,-,PLASTIC,11.5
IC02	IC-POSI.FIXED REG.	7805,TO-220,3P,-,PLASTIC,4.8/5
IC03	IC-VOLTAGE COMP.	7533,TO-92,3P,-,SINGLE,-,-,PLASTIC
IC04	IC MICOM	MB89538AP-101,MB89538AP-101,64P,+5V,10MHz
IC05	IC-DARLINGTON DRIVER	KID65003AP,DIP,16PIN,300MIL,H
IC06	IC-DARLINGTON DRIVER	KID65003AP,DIP,16PIN,300MIL,H
IC07	IC-DARLINGTON DRIVER	KID65003AP,DIP,16PIN,300MIL,H
IC09	IC-BUS TRANSCEIVER	485,DIP,8P,300MIL,SINGLE,ST,PLASTIC
IC51	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST
IC52	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST

■ **Parts List(cont.)**

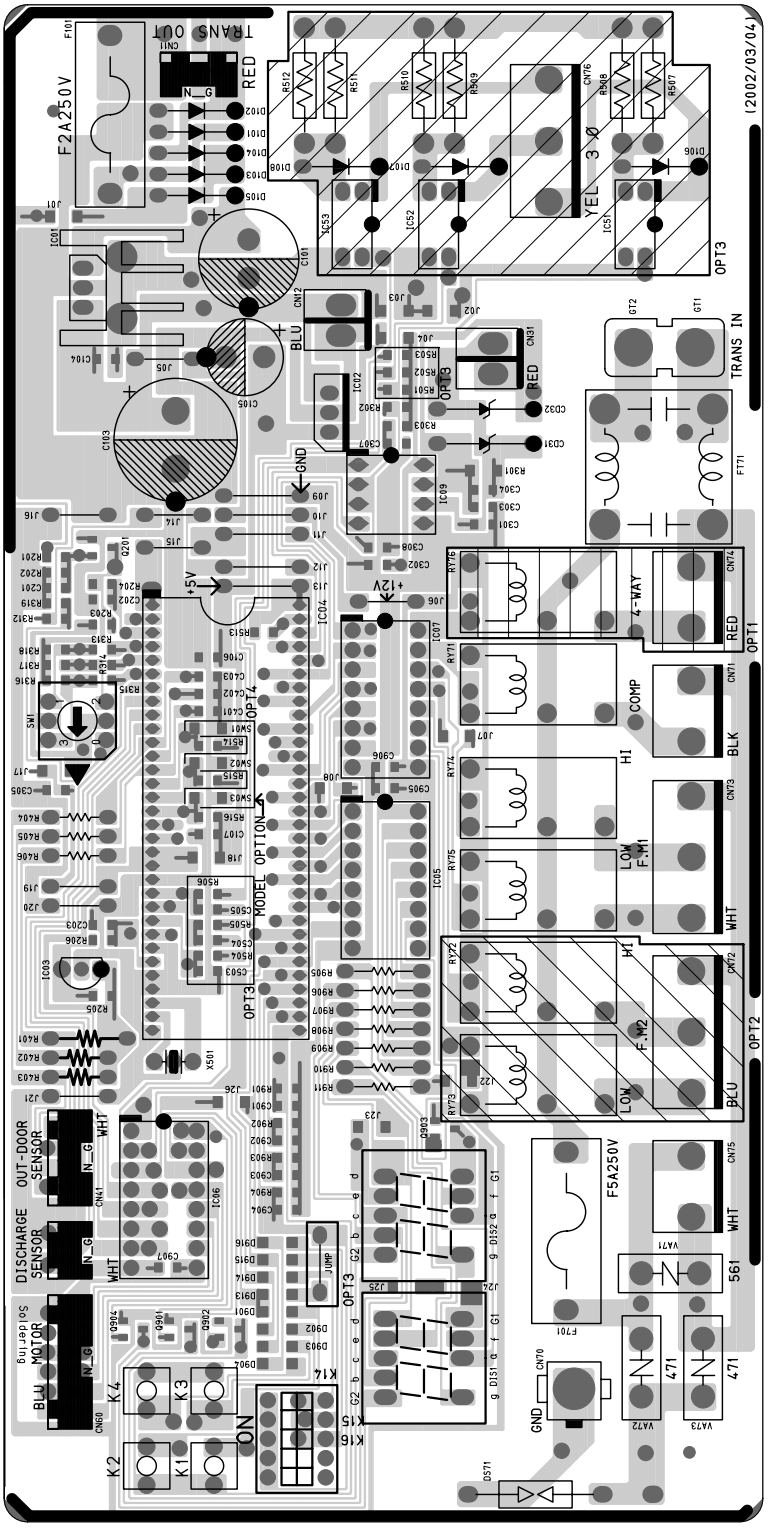
Location No.	Description	Specification
IC53	PHOTO-COUPLER	TR,130-260%,200mW,DIP-4,ST
K1	SWITCH-PUSH	125V,1A,SPDT,ON-ON,-
K13	R-CARBON	0ohm,5%,1/4W,AA,TP,2.4x6.4mm
K14	R-CARBON	0ohm,5%,1/4W,AA,TP,2.4x6.4mm
K15	R-CARBON	0ohm,5%,1/4W,AA,TP,2.4x6.4mm
K16	R-CARBON	0ohm,5%,1/4W,AA,TP,2.4x6.4mm
K2	SWITCH-PUSH	125V,1A,SPDT,ON-ON,-
K3	SWITCH-PUSH	125V,1A,SPDT,ON-ON,-
K4	SWITCH-PUSH	125V,1A,SPDT,ON-ON,-
Q101	TR-DIGITAL	KSR1102,NPN,200MW,10K/10K,SOT-23,TP
Q201	TR-SMALL SIGNAL	2SC2412K,NPN,200mW,SOT-23,TP,1
Q901	TR-DIGITAL	DTA114EKA,PNP,200MW,10K/10K,SOT-23,TP
Q902	TR-DIGITAL	DTA114EKA,PNP,200MW,10K/10K,SOT-23,TP
Q903	TR-DIGITAL	DTA114EKA,PNP,200MW,10K/10K,SOT-23,TP
Q904	TR-DIGITAL	DTA114EKA,PNP,200MW,10K/10K,SOT-23,TP
R201	R-CHIP	10Kohm,5%,1/8W,TP,2012
R202	R-CHIP	3.3Kohm,5%,1/8W,TP,2012
R203	R-CHIP	1Kohm,5%,1/8W,TP,2012
R204	R-CHIP	1Kohm,5%,1/8W,TP,2012
R205	R-CHIP	1Kohm,5%,1/8W,TP,2012
R301	R-CHIP	120ohm,5%,1/8W,TP,2012
R302	R-CHIP	10Kohm,5%,1/8W,TP,2012
R303	R-CHIP	10Kohm,5%,1/8W,TP,2012
R312	R-CHIP	10Kohm,5%,1/8W,TP,2012
R313	R-CHIP	10Kohm,5%,1/8W,TP,2012
R314	R-CHIP	10Kohm,5%,1/8W,TP,2012
R315	R-CHIP	10Kohm,5%,1/8W,TP,2012
R316	R-CHIP	10Kohm,5%,1/8W,TP,2012
R317	R-CHIP	10Kohm,5%,1/8W,TP,2012
R318	R-CHIP	10Kohm,5%,1/8W,TP,2012
R319	R-CHIP	10Kohm,5%,1/8W,TP,2012
R401	R-CHIP	24Kohm,1%,1/8W,TP,2012
R402	R-CHIP	18Kohm,1%,1/8W,TP,2012
R403	R-CHIP	18Kohm,1%,1/8W,TP,2012
R404	R-CHIP	330ohm,5%,1/8W,TP,2012
R405	R-CHIP	330ohm,5%,1/8W,TP,2012
R406	R-CHIP	330ohm,5%,1/8W,TP,2012
R501	R-CHIP	10Kohm,5%,1/8W,TP,2012
R502	R-CHIP	10Kohm,5%,1/8W,TP,2012
R503	R-CHIP	10Kohm,5%,1/8W,TP,2012
R504	R-CHIP	330ohm,5%,1/8W,TP,2012
R505	R-CHIP	330ohm,5%,1/8W,TP,2012
R506	R-CHIP	330ohm,5%,1/8W,TP,2012
R507	R-METAL OXIDE	200Kohm,5%,2W,AA,BK,5.5x16mm
R508	R-METAL OXIDE	200Kohm,5%,2W,AA,BK,5.5x16mm
R509	R-METAL OXIDE	200Kohm,5%,2W,AA,BK,5.5x16mm

■ **Parts List(cont.)**

Location No.	Description	Specification
R510	R-METAL OXIDE	200Kohm,5%,2W,AA,BK,5.5x16mm
R511	R-METAL OXIDE	200Kohm,5%,2W,AA,BK,5.5x16mm
R512	R-METAL OXIDE	200Kohm,5%,2W,AA,BK,5.5x16mm
R513	R-CHIP	10Kohm,5%,1/8W,TP,2012
R514	R-CHIP	10Kohm,5%,1/8W,TP,2012
R515	R-CHIP	10Kohm,5%,1/8W,TP,2012
R516	R-CHIP	10Kohm,5%,1/8W,TP,2012
R517	R-CHIP	10Kohm,5%,1/8W,TP,2012
R901	R-CHIP	10Kohm,5%,1/8W,TP,2012
R902	R-CHIP	10Kohm,5%,1/8W,TP,2012
R903	R-CHIP	10Kohm,5%,1/8W,TP,2012
R904	R-CHIP	10Kohm,5%,1/8W,TP,2012
R905	R-CHIP	10Kohm,5%,1/8W,TP,2012
R906	R-CHIP	10Kohm,5%,1/8W,TP,2012
R907	R-CHIP	10Kohm,5%,1/8W,TP,2012
R908	R-CHIP	10Kohm,5%,1/8W,TP,2012
R909	R-CHIP	10Kohm,5%,1/8W,TP,2012
R910	R-CHIP	10Kohm,5%,1/8W,TP,2012
R911	R-CHIP	10Kohm,5%,1/8W,TP,2012
RJ01	R-CARBON	0ohm,5%,1/4W,AA,TP,2.4x6.4mm
RJ02	R-CARBON	0ohm,5%,1/4W,AA,TP,2.4x6.4mm
RJ03	R-CARBON	0ohm,5%,1/4W,AA,TP,2.4x6.4mm
RJ04	R-CARBON	0ohm,5%,1/4W,AA,TP,2.4x6.4mm
RY71	RELAY-MINIATURE	12VDC,200MW,3000MA,1FORMA,10MS,10M
RY72	RELAY-MINIATURE	12VDC,200MW,3000MA,1FORMA,10MS,10M
RY73	RELAY-MINIATURE	12VDC,200MW,3000MA,1FORMA,10MS,10M
RY74	RELAY-MINIATURE	12VDC,200MW,3000MA,1FORMA,10MS,10M
RY75	RELAY-MINIATURE	12VDC,200MW,3000MA,1FORMA,10MS,10M
RY76	RELAY-MINIATURE	12VDC,200MW,3000MA,1FORMA,10MS,10M
RY77	RELAY-MINIATURE	12VDC,200MW,3000MA,1FORMA,10MS,10M
SW02	SWITCH-DIP	5V DC,100mA,SLIDE,-
SW03	SWITCH-DIP	5V DC,100mA,SLIDE,-
SW1	SWITCH-DIGITAL	PT65 103,ROTARY DIP,-,DC24V MAX,0.4
VA71	VARISTOR	560V,2500A,17.5x7.5mm,TP
VA72	VARISTOR	470V,4500A,17x12mm,BK
VA73	VARISTOR	470V,4500A,17x12mm,BK
X501	RESONATOR-CERAMIC	10MHZ,0.5%,BK,8x3x5.5mm

7-2-2 UH128GZM / UH140GZM (Code No : DB93-02342A)
UH175GZM / UH175GCM(Code No : DB93-02343A)

■ TOP



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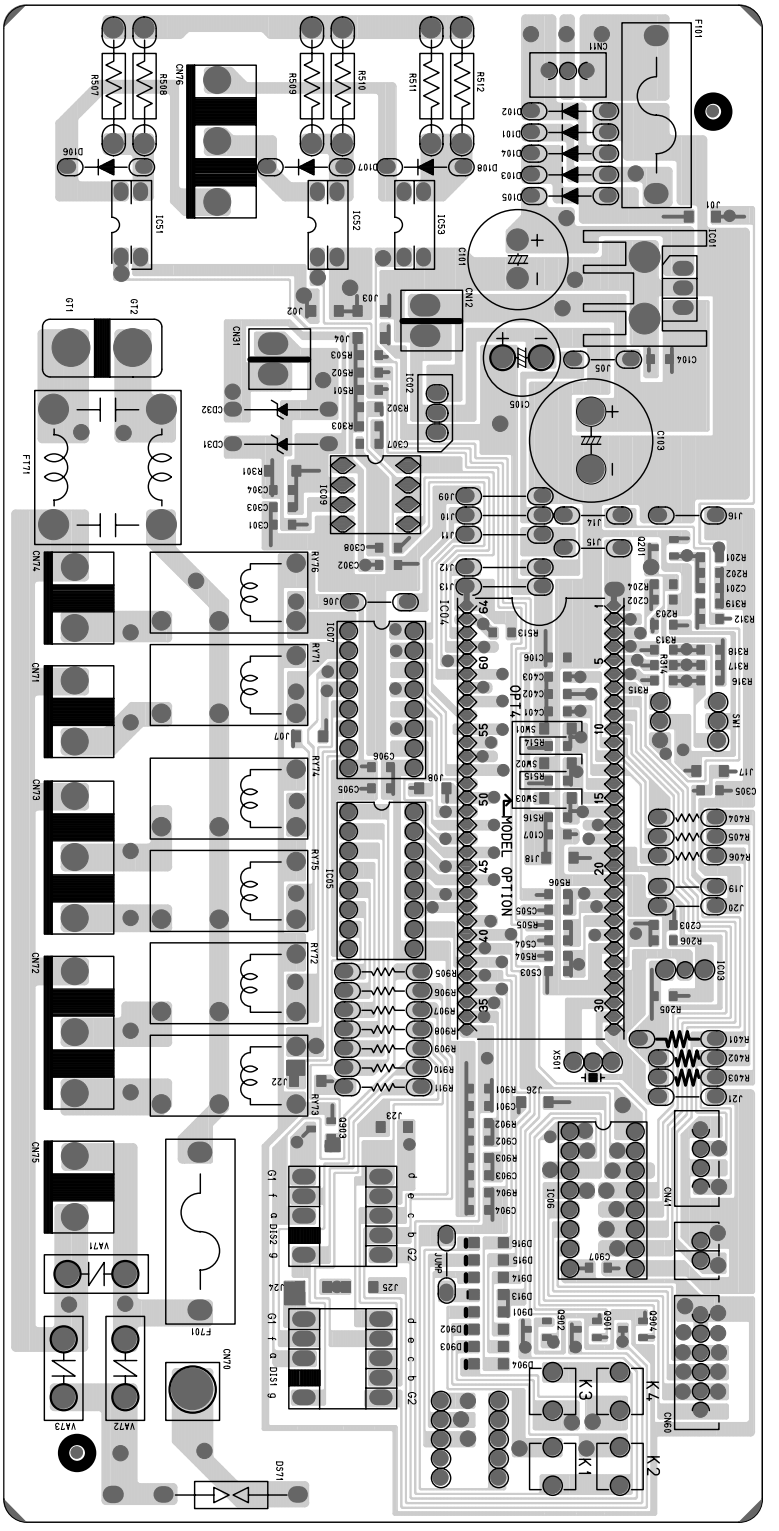


■ Parts List

Location No.	Description	Specification
C101	C-AL	1000uF,20%,35V,GP,TP,13x25,5
C103	C-AL	2200uF,20%,25V,GP,TP,16x25,7.5
C104	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C105	C-AL	470uF,20%,25V,GP,TP,10x16,5
C106	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C107	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C201	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C202	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,2012
C203	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C301	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C302	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C303	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C304	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,2012
C305	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C306	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C307	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C308	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C401	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C402	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C403	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C503	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C504	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C505	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C901	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,2012
C902	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,2012
C903	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,2012
C904	C-CERAMIC,CHIP	10nF,10%,50V,X7R,TP,2012
C905	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C906	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
C907	C-CERAMIC,CHIP	100nF,+80-20%,50V,Y5V,TP,2012
CD31	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15
CD32	DIODE-TVS	SAC5.0,7.6/-/-V,500W,DO-15
CN11	CONNECTOR-HEADER	BOX,3P,1R,2.5mm,STRAIGHT,SN
CN12	CONNECTOR-HEADER	1WALL,2P,1R,3.96mm,STRAIGHT,SN
CN31	CONNECTOR-HEADER	1WALL,2P,1R,3.96mm,STRAIGHT,SN
CN41	CONNECTOR-HEADER	BOX,4P,1R,2.5mm,STRAIGHT,SN
CN42	CONNECTOR-HEADER	BOX,2P,1R,2.5mm,STRAIGHT,SN
CN60	CONNECTOR-HEADER	BOX,6P,1R,2.5mm,STRAIGHT,SN
CN70	CONNECTOR-HEADER	BOX,1P,1R,-,STRAIGHT,NI
CN71	CONNECTOR-HEADER	1WALL,3P,1R,3.96mm,STRAIGHT,SN
CN72	CONNECTOR-HEADER	1WALL,3P/5P,1R,3.96mm,STRAIGHT
CN73	CONNECTOR-HEADER	1WALL,3P/5P,1R,3.96mm,STRAIGHT
CN74	CONNECTOR-HEADER	1WALL,3P,1R,3.96mm,STRAIGHT,SN
CN75	CONNECTOR-HEADER	1WALL,3P,1R,3.96mm,STRAIGHT,SN
D101	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D102	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP

■ **Parts List(cont.)**

Location No.	Description	Specification
D103	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D104	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D105	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D106	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D107	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D108	DIODE-RECTIFIER	1N4007,1000V,1A,DO-41,TP
D901	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,TP
D902	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,TP
D903	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,TP
D904	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,TP
D913	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,TP
D914	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,TP
D915	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,TP
D916	DIODE-SWITCHING	MM4148,100V,150MA,LL-34,TP
DIS1	LED DISPLAY	SSD-A3202GS-A15,GRN,2digit,16x
DIS2	LED DISPLAY	SSD-A3202GS-A15,GRN,2digit,16x
DS71	SURGE ABSORBER	3.3kV,20%,1500A,-,AXIAL
F101	FUSE	FSF,250V,2A,20mm,50F,-
F101	HOLDER-FUSE	FH-51H,7.5A,-,-,-,-,-
F701	FUSE-CARTRIDGE	250V,5A,FAST-ACTING,GLASS,5.2x20mm
F701	HOLDER-FUSE	FH-51H,7.5A,-,-,-,-,-
FT71	FILTER-NOISE	MD,250V1.6A,-25C/85C
GT1	CONNECTOR-TERMINAL	PIN,MALE,#18-22,2.35mm
GT2	CONNECTOR-TERMINAL	PIN,MALE,#18-22,2.35mm
IC01	HEAT SINK-S1	A6063,L25.5,W15,-,WHT,25x22
IC01	IC-VOLT REGU	KA7812A,TO-220AB,-,-,-,-,-
IC01	SCREW-TAP PH	-,-,FEFZY,-,PH,M3,-,L8,-,-
IC02	IC-VOLT REGU	KA7805A,TO-220AB,1A,0/125C,-,-
IC03	IC	KA7533,DIP,-,-,-,-,-
IC04	IC MICOM	MB89P637P-G-SH,16K,DIP,OTP,-,-
IC05	IC-DRIVE	KID65003AP,DIP,16P,STICK,TR-AR
IC06	IC-DRIVE	KID65003AP,DIP,16P,STICK,TR-AR
IC07	IC-DRIVE	KID65003AP,DIP,16P,STICK,TR-AR
IC09	IC-BUS TRANSCEIVER	485,DIP,8P,300MIL,SINGLE,ST,PLASTIC
IC51	PHOTO COUPLER	PC817
IC52	PHOTO COUPLER	PC817
IC53	PHOTO COUPLER	PC817
J01	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J02	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J03	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J04	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J06	WIRE-SO COPPER	PI0.6,SN,T,52MM TAPING_WIRE
J07	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J08	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J09	WIRE-SO COPPER	PI0.6,SN,T,52MM TAPING_WIRE
J10	WIRE-SO COPPER	PI0.6,SN,T,52MM TAPING_WIRE

■ **Parts List(cont.)**

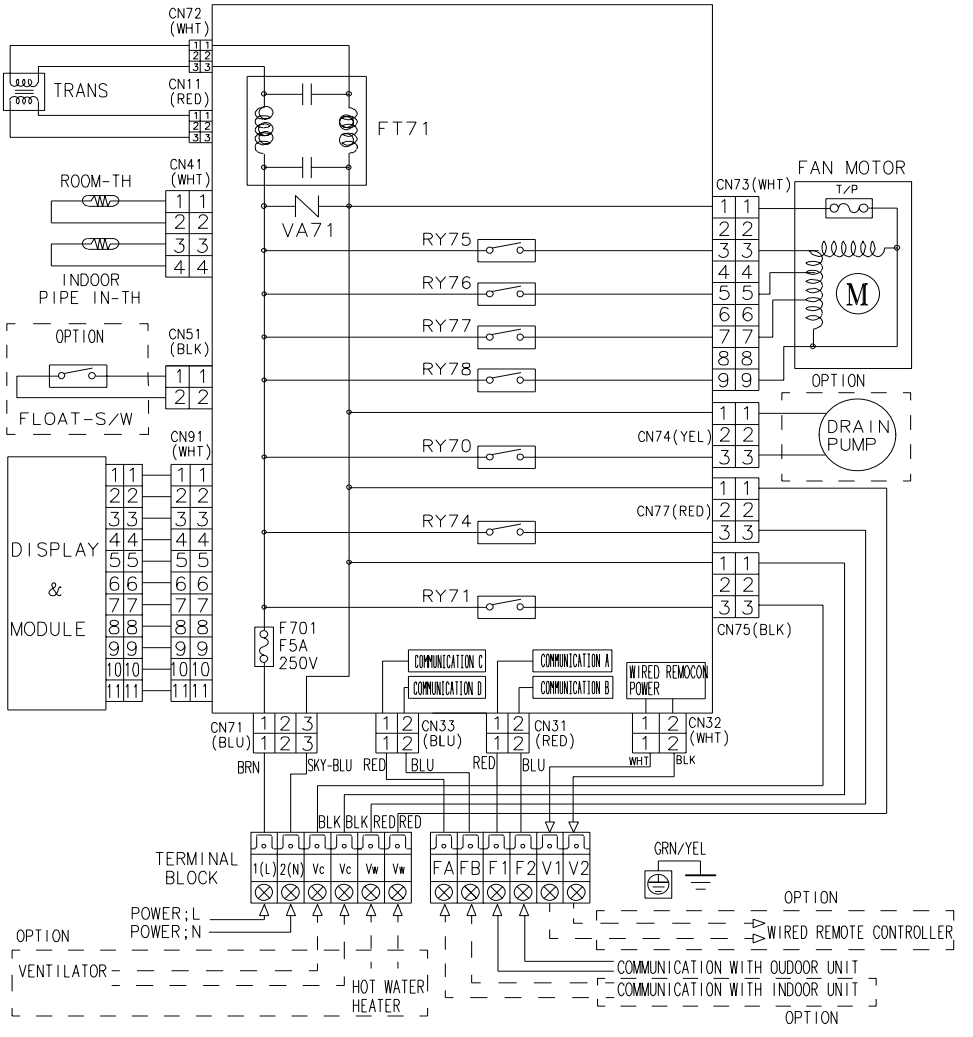
Location No.	Description	Specification
J11	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J12	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J13	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J14	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J15	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J16	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J17	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J18	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J19	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J20	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J21	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
J22	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J23	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J24	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J25	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
J26	R-CHIP	0OHM,5%,1/8W,DA,TP,3216
K1	SWITCH-TACT	12V,50mA,160gf,6x6x3.6mm,SPST
K13	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
K14	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
K16	WIRE-SO COPPER	PI0.6,SN,T,52mm TAPING_WIRE
K2	SWITCH-TACT	12V,50mA,160gf,6x6x3.6mm,SPST
K3	SWITCH-TACT	12V,50mA,160gf,6x6x3.6mm,SPST
K4	SWITCH-TACT	12V,50mA,160gf,6x6x3.6mm,SPST
PCB	PCB-SUB	PE-DPM-00,FR-1,-,-,T1.6,W197*L197,-,-,-,-
Q201	TR-SMALL SIGNAL	MMBT3904,NPN,350MW,SOT-23,TP,30-300
Q901	TR-DIGITAL	KRA226M,PNP,400MW,2.2K/10K,TO-92M,TP
Q902	TR-DIGITAL	KRA226M,PNP,400MW,2.2K/10K,TO-92M,TP
Q903	TR-DIGITAL	KRA226M,PNP,400MW,2.2K/10K,TO-92M,TP
Q904	TR-DIGITAL	KRA226M,PNP,400MW,2.2K/10K,TO-92M,TP
R201	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R202	R-CHIP	3.3KOHM,5%,1/10W,DA,TP,2012
R203	R-CHIP	1KOHM,5%,1/10W,DA,TP,2012
R204	R-CHIP	1KOHM,5%,1/10W,DA,TP,2012
R205	R-CHIP	1KOHM,5%,1/10W,DA,TP,2012
R206	R-CHIP	1KOHM,5%,1/10W,DA,TP,2012
R301	R-CHIP	120OHM,5%,1/8W,DA,TP,3216
R302	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R303	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R312	R-CHIP	1KOHM,5%,1/10W,DA,TP,2012
R313	R-CHIP	1KOHM,5%,1/10W,DA,TP,2012
R314	R-CHIP	1KOHM,5%,1/10W,DA,TP,2012
R315	R-CHIP	1KOHM,5%,1/10W,DA,TP,2012
R316	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R317	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R318	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R319	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012

■ **Parts List(cont.)**

Location No.	Description	Specification
R401	R-METAL	24Kohm,1%,1/4W,AA,TP,2.4x6.4mm
R402	R-METAL	18Kohm,1%,1/8W,AA,TP,1.8x3.2mm
R403	R-METAL	18Kohm,1%,1/8W,AA,TP,1.8x3.2mm
R404	R-CARBON	330ohm,5%,1/8W,AA,TP,1.8x3.2mm
R405	R-CARBON	330ohm,5%,1/8W,AA,TP,1.8x3.2mm
R406	R-CARBON	330ohm,5%,1/8W,AA,TP,1.8x3.2mm
R501	R-CHIP	10KOHM,5%,1/8W,DA,TP,2012
R502	R-CHIP	10KOHM,5%,1/8W,DA,TP,2012
R503	R-CHIP	10KOHM,5%,1/8W,DA,TP,2012
R504	R-CHIP	330ohm,5%,1/8w,DA,TP,2012
R505	R-CHIP	330ohm,5%,1/8w,DA,TP,2012
R506	R-CHIP	330ohm,5%,1/8w,DA,TP,2012
R507	R-METAL OXIDE	200Kohm,5%,2W,AA,TP
R508	R-METAL OXIDE	200Kohm,5%,2W,AA,TP
R509	R-METAL OXIDE	200Kohm,5%,2W,AA,TP
R510	R-METAL OXIDE	200Kohm,5%,2W,AA,TP
R511	R-METAL OXIDE	200Kohm,5%,2W,AA,TP
R512	R-METAL OXIDE	200Kohm,5%,2W,AA,TP
R513	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R514	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R515	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R516	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R901	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R902	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R903	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R904	R-CHIP	10KOHM,5%,1/10W,DA,TP,2012
R905	R-CARBON(S)	1KOHM,5%,1/2W,AA,TP,2.4x6.4mm
R906	R-CARBON(S)	1KOHM,5%,1/2W,AA,TP,2.4x6.4mm
R907	R-CARBON(S)	1KOHM,5%,1/2W,AA,TP,2.4x6.4mm
R908	R-CARBON(S)	1KOHM,5%,1/2W,AA,TP,2.4x6.4mm
R909	R-CARBON(S)	1KOHM,5%,1/2W,AA,TP,2.4x6.4mm
R910	R-CARBON(S)	1KOHM,5%,1/2W,AA,TP,2.4x6.4mm
R911	R-CARBON(S)	1KOHM,5%,1/2W,AA,TP,2.4x6.4mm
RY71	RELAY-MINIATURE	12Vdc,200mW,5A,1FormA,6mS,4mS
RY72	RELAY-MINIATURE	12Vdc,200mW,5A,1FormA,6mS,4mS
RY73	RELAY-MINIATURE	12Vdc,200mW,5A,1FormA,6mS,4mS
RY74	RELAY-MINIATURE	12Vdc,200mW,5A,1FormA,6mS,4mS
RY75	RELAY-MINIATURE	12Vdc,200mW,5A,1FormA,6mS,4mS
RY76	RELAY-MINIATURE	12Vdc,200mW,5A,1FormA,6mS,4mS
SW1	SWITCH-DIGITAL	JM2005,-,-,-,10mmx6.0mm,-,PAC,-,-
VA71	VARISTOR	560V,2500A,17.5x7.5mm,TP
VA72	VARISTOR	470V,4500A,17x12mm,BK
VA73	VARISTOR	470V,4500A,17x12mm,BK
X501	RESONATOR-CERAMIC	10MHz,0.5%,TP,10.0x5.0x8.0mm

8. Wiring Diagram

8-1 Indoor Unit



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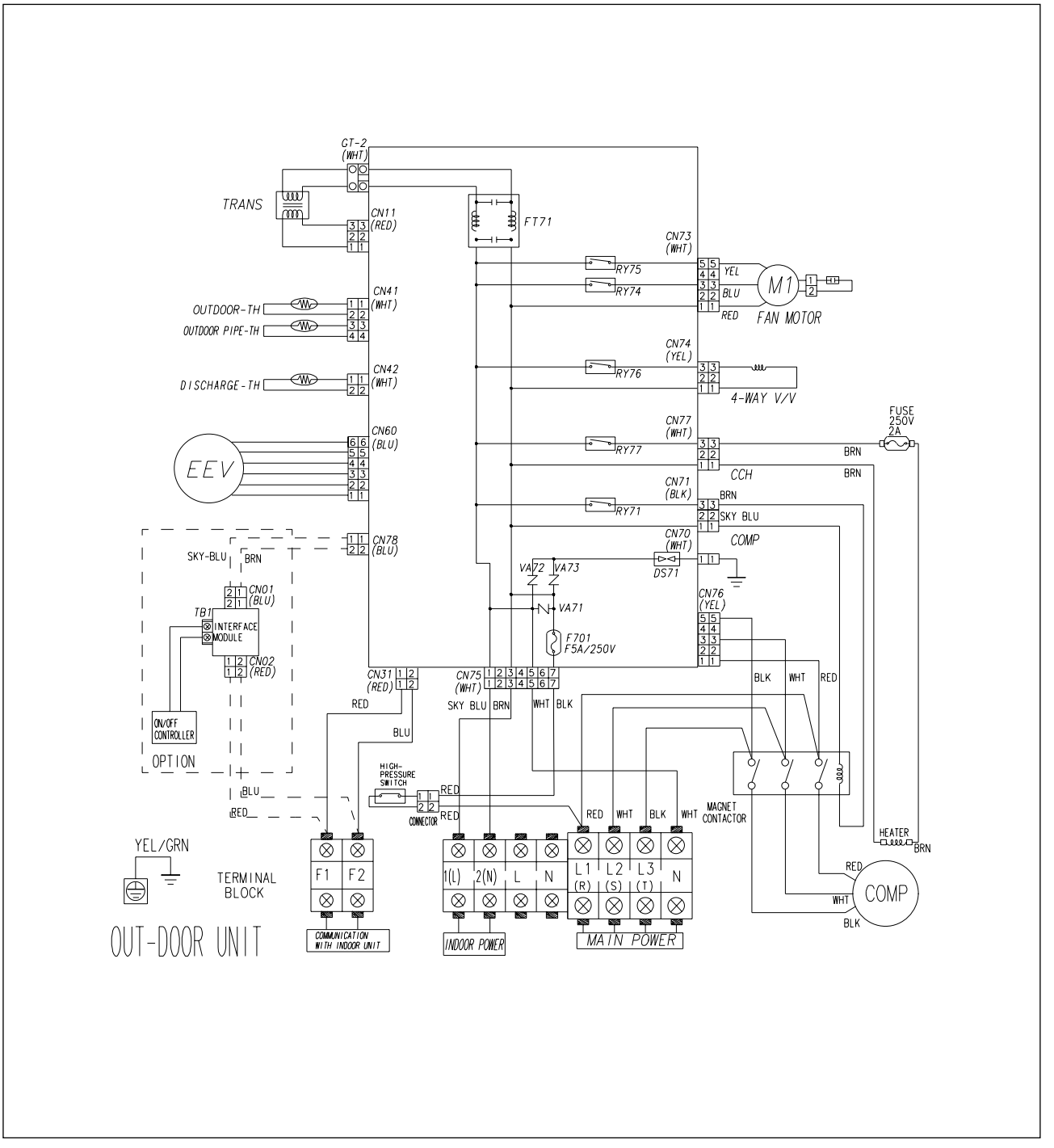
■ UH105GZM



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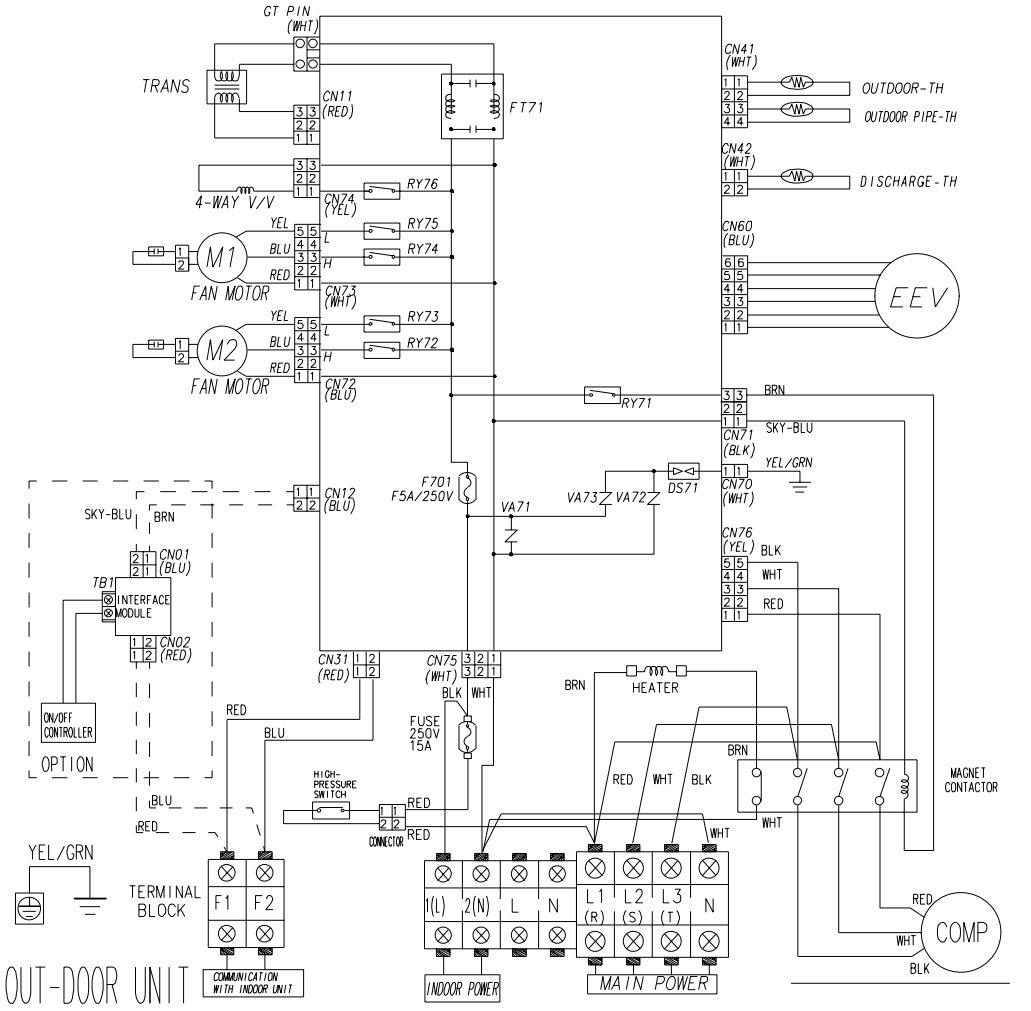

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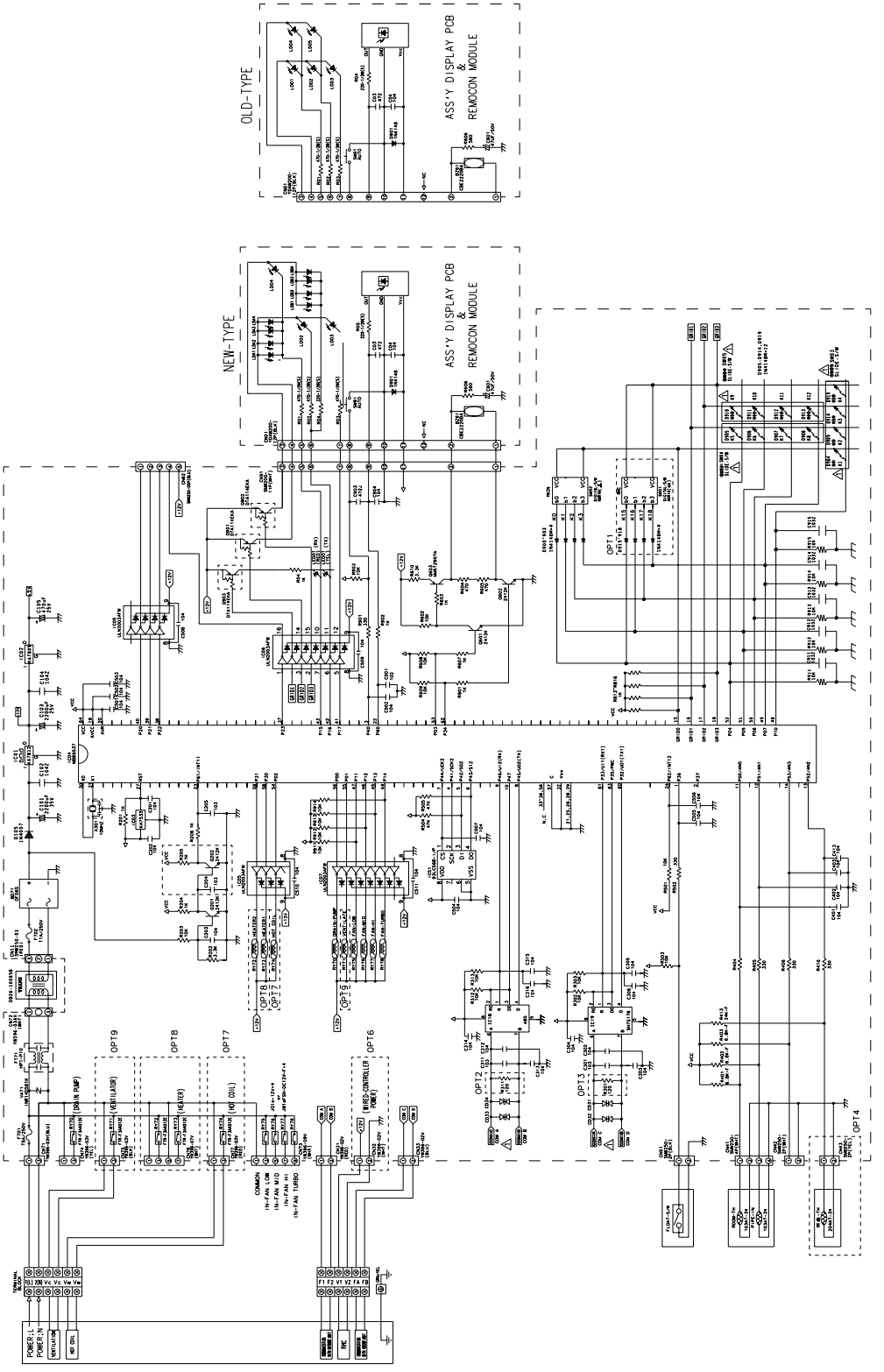
9. Schematic Diagram

9-1 Indoor Unit



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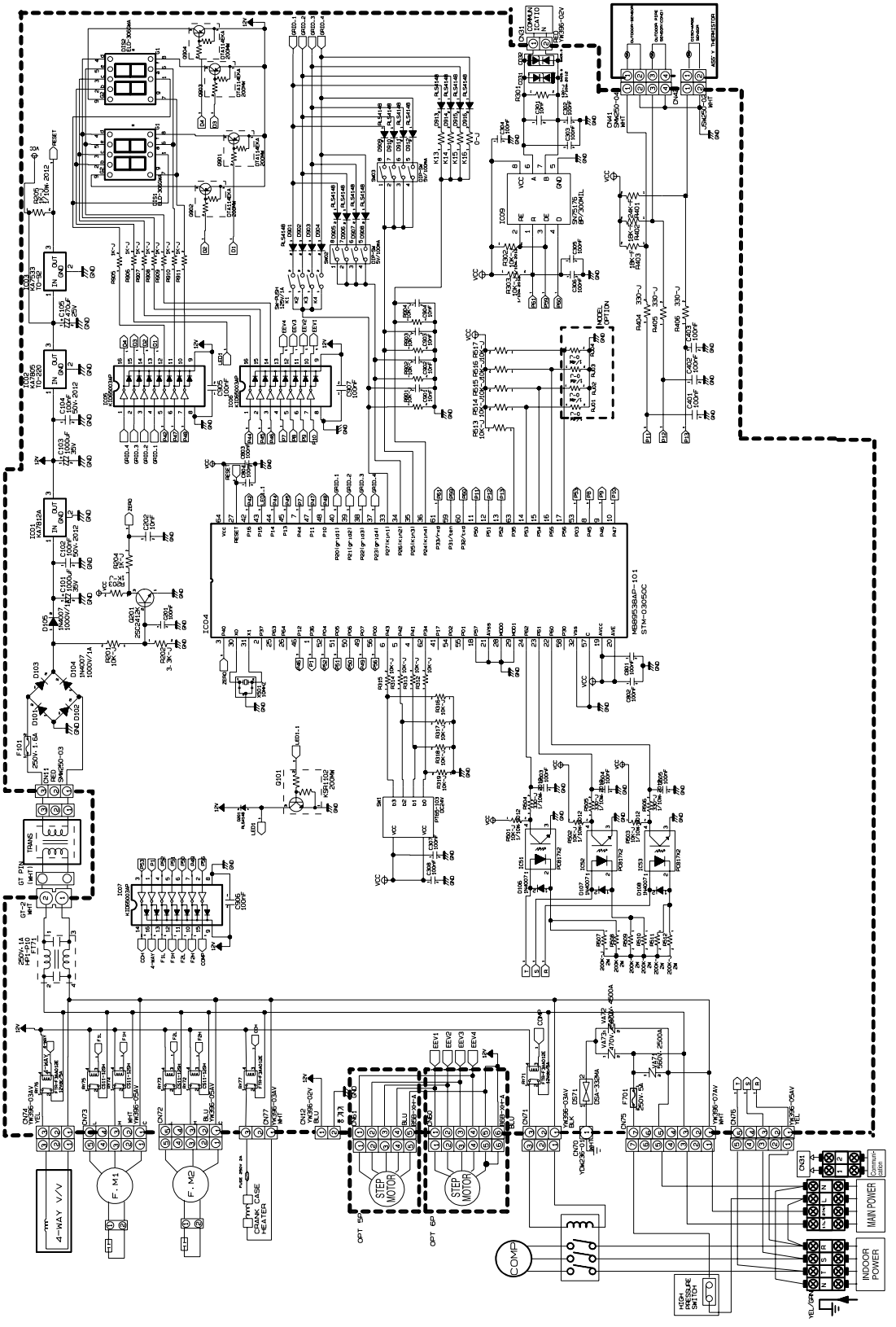
■ UH105GZM



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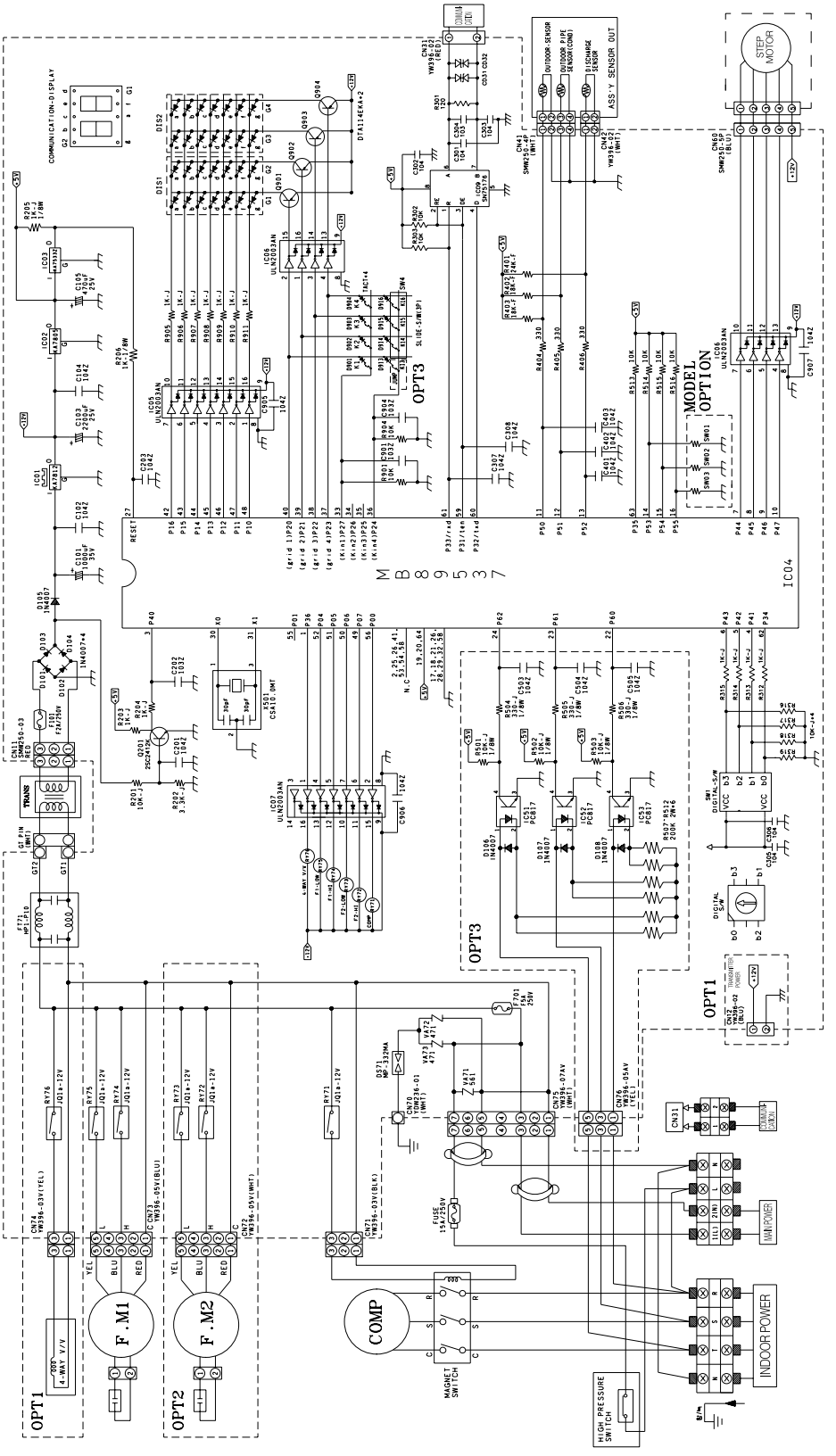
■ UH128GZM / UH140GZM / UH175GZM / UH175GCM



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